
HTML Rendering Library Reference

(Not Recommended)

[Carbon > Graphics & Imaging](#)



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HTML Rendering Library Reference (Not Recommended)

Framework:	Carbon/Carbon.h
Declared in	HTMLRendering.h

Overview

Important: The HTML Rendering Library is deprecated as of Mac OS X v10.4. A much more complete solution for displaying HTML and web content in your application is provided by the Web Kit. See *WebKit Objective-C Programming Guide* for guidelines on using the Web Kit.

Whereas the HTML Rendering Library takes a specified HTML file and draws text and images in a window, the Web Kit inserts a browser window into your document. The user can specify any URL and follow links in the Web Kit view window. Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. With the Web Kit, your application can include anything from an HTML viewing window to a full-featured web browser.

Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

The HTML Rendering Library gives your application the ability to draw text and images in a window, as specified by HTML data. Note that this API does not include other features of HTML browsers, such as history tracking or plug-in support. The kinds of tasks you can perform with the HTML Rendering Library include

- formatting and updating the rendering area with such elements as borders, scroll bars, and size boxes in scroll bars
- setting such graphics and display options as screen depth and graphics ports
- working with events
- drawing pages from HTML data
- obtaining information about pages
- converting URL and file system specification data

Functions by Task

Identifying The HTML Rendering Library

[HRHTMLRenderingLibAvailable](#) (page 14)

Reports whether the HTML Rendering Library is available. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetHTMLRenderingLibVersion](#) (page 36) **Deprecated in Mac OS X v10.4**

Identifies which version of the HTML Rendering Library is available. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Handling Newly Visited Links

[DisposeHRNewURLUPP](#) (page 25) **Deprecated in Mac OS X v10.4**

Disposes of a previously obtained UPP. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRRegisterNewURLUPP](#) (page 53) **Deprecated in Mac OS X v10.4**

Registers an application-defined function that handles newly visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUnregisterNewURLUPP](#) (page 65) **Deprecated in Mac OS X v10.4**

Unregisters a previously registered application-defined function. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[NewHRNewURLUPP](#) (page 76) **Deprecated in Mac OS X v10.4**

Obtains a UPP for an application-defined function that handles newly visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Handling Previously Visited Links

[DisposeHRWasURLVisitedUPP](#) (page 28) **Deprecated in Mac OS X v10.4**

Disposes of a previously obtained UPP. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRRegisterWasURLVisitedUPP](#) (page 56) **Deprecated in Mac OS X v10.4**

Registers an application-defined function that handles previously visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUnregisterWasURLVisitedUPP](#) (page 67) **Deprecated in Mac OS X v10.4**

Unregisters a previously registered application-defined function. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[NewHRWasURLVisitedUPP](#) (page 79) **Deprecated in Mac OS X v10.4**

Obtains a UPP for an application-defined function that handles previously visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Obtaining and Disposing of HRReference Values

[HRDisposeReference](#) (page 29) **Deprecated in Mac OS X v10.4**

Disposes of a previously obtained HRReference. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRNewReference](#) (page 51) **Deprecated in Mac OS X v10.4**

Obtains a new HRReference. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRNewReferenceInWindow](#) (page 52) **Deprecated in Mac OS X v10.4**

Obtains a new HRReference. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Formatting the Rendering Area

[HRSetDrawBorder](#) (page 59) **Deprecated in Mac OS X v10.4**

Specifies whether to draw a border around the rendering area. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRSetGrowboxCutout](#) (page 61) **Deprecated in Mac OS X v10.4**

Specifies whether to allow for a size box when drawing scrollbars. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRSetScrollbarState](#) (page 63) **Deprecated in Mac OS X v10.4**

Specifies how scrollbars are drawn. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Intercepting and Redirecting URL's

[DisposeHRURLToFSSpecUPP](#) (page 26) **Deprecated in Mac OS X v10.4**

Disposes of a previously obtained UPP. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRRegisterURLToFSSpecUPP](#) (page 55) **Deprecated in Mac OS X v10.4**

Registers an application-defined function that handles previously visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUnregisterURLToFSSpecUPP](#) (page 66) **Deprecated in Mac OS X v10.4**

Unregisters a previously registered application-defined function. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[NewHRURLToFSSpecUPP](#) (page 78) **Deprecated in Mac OS X v10.4**

Obtains a UPP for an application-defined function that intercepts URL's. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Setting and Updating the Rendering Area

[HRDraw](#) (page 30) **Deprecated in Mac OS X v10.4**

Updates a specified region for a given HRReference. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRDrawInPort](#) (page 31) **Deprecated in Mac OS X v10.4**

Updates a specified region for a given `HRReference`. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetRenderedImageSize](#) (page 38) **Deprecated in Mac OS X v10.4**

Reports the size of the rendered image. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetRenderedImageSize32](#) (page 39) **Deprecated in Mac OS X v10.4**

Reports the size of the rendered image. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRScrollToImageLocation32](#) (page 57) **Deprecated in Mac OS X v10.4**

Scrolls to a specified view of the HTML rendering area. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRScrollToLocation](#) (page 58) **Deprecated in Mac OS X v10.4**

Scrolls to a specified view of the HTML rendering area. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRSetRenderingRect](#) (page 62) **Deprecated in Mac OS X v10.4**

Specifies the boundaries of the HTML rendering area. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Setting Graphics and Display Options

[HRForceQuickdraw](#) (page 32) **Deprecated in Mac OS X v10.4**

Forces all images to be drawn with QuickDraw. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRFreeMemory](#) (page 32) **Deprecated in Mac OS X v10.4**

Attempts to release cache memory for use by your application. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRScreenConfigurationChanged](#) (page 57) **Deprecated in Mac OS X v10.4**

Informs the HTML Rendering Library that the screen depth has changed. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRSetGrafPtr](#) (page 60) **Deprecated in Mac OS X v10.4**

Sets a new `GrafPort` for a given `HRReference`. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Working With Events

[HRActivate](#) (page 28) **Deprecated in Mac OS X v10.4**

Activates the window associated with a given `HRReference`. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRDeactivate](#) (page 29) **Deprecated in Mac OS X v10.4**

Deactivates the window associated with a given `HRReference`. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRIsHREvent](#) (page 50) **Deprecated in Mac OS X v10.4**

Gives the HTML Rendering Library an opportunity to handle events. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Navigating HTML Pages

[HrGoToAnchor](#) (page 43) **Deprecated in Mac OS X v10.4**

Specifies an HTML anchor to scroll into view. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToAnchorCFString](#) (page 44) **Deprecated in Mac OS X v10.4**

Specifies an HTML anchor to scroll into view. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToCFURL](#) (page 45) **Deprecated in Mac OS X v10.4**

Renders a local file specified as a URL. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToData](#) (page 45) **Deprecated in Mac OS X v10.4**

Specifies HTML data for rendering. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToFile](#) (page 46) **Deprecated in Mac OS X v10.4**

Specifies an HTML file for rendering. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToFSRef](#) (page 47) **Deprecated in Mac OS X v10.4**

Renders a set of HTML data from a specified buffer. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToPtr](#) (page 48) **Deprecated in Mac OS X v10.4**

Renders a set of HTML data from a specified buffer. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGoToURL](#) (page 49) **Deprecated in Mac OS X v10.4**

Renders a local file specified as a URL. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Obtaining Information About Pages

[HrGetBaseURL](#) (page 33) **Deprecated in Mac OS X v10.4**

Obtains the base URL of a given HTML page. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGetBaseURLAsCFString](#) (page 34) **Deprecated in Mac OS X v10.4**

Obtains the base URL of a given HTML page. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGetHTMLFile](#) (page 35) **Deprecated in Mac OS X v10.4**

Obtains a file system specification record for a given HTML page. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGetHTMLFileAsFSRef](#) (page 35) **Deprecated in Mac OS X v10.4**

Obtains an FSRef for a given HTML page. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HrGetHTMLURL](#) (page 37) **Deprecated in Mac OS X v10.4**

Obtains the URL for a given HTML page. (**Deprecated**. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetHTMLURLAsCFURL](#) (page 38) **Deprecated in Mac OS X v10.4**

Obtains the URL for a given HTML page. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetRootURL](#) (page 40) **Deprecated in Mac OS X v10.4**

Obtains the root URL for all relative links on a given HTML page. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetRootURLAsCFString](#) (page 41) **Deprecated in Mac OS X v10.4**

Obtains the root URL for all relative links on a given HTML page. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetTitle](#) (page 41) **Deprecated in Mac OS X v10.4**

Obtains the title of a given HTML page. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRGetTitleAsCFString](#) (page 42) **Deprecated in Mac OS X v10.4**

Obtains the title of a given HTML page. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Converting URL and FSSpec Data

[HRUtilCreateFullCFURL](#) (page 68) **Deprecated in Mac OS X v10.4**

Obtains a full URL from a given set of relative URLs. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUtilCreateFullURL](#) (page 68) **Deprecated in Mac OS X v10.4**

Obtains a full URL from a given set of relative URLs. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUtilGetFSRefFromURL](#) (page 69) **Deprecated in Mac OS X v10.4**

Obtains a FSRef from a given set of relative URLs. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUtilGetFSSpecFromURL](#) (page 70) **Deprecated in Mac OS X v10.4**

Obtains a FSSpec from a given set of relative URLs. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUtilGetURLFromFSRef](#) (page 71) **Deprecated in Mac OS X v10.4**

Obtains a full URL from a given FSRef. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[HRUtilGetURLFromFSSpec](#) (page 72) **Deprecated in Mac OS X v10.4**

Obtains a full URL from a given FSSpec. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Working With Universal Procedure Pointers

[DisposeHRNewCFURLUPP](#) (page 25) **Deprecated in Mac OS X v10.4**

(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[DisposeHRURLToFSRefUPP](#) (page 26) **Deprecated in Mac OS X v10.4**

(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

[DisposeHRWasCFURLVisitedUPP](#) (page 27) **Deprecated in Mac OS X v10.4**

(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

- [HRRegisterNewCFURLUPP](#) (page 53) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRRegisterURLToFSRefUPP](#) (page 54) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRRegisterWasCFURLVisitedUPP](#) (page 55) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRUnregisterNewCFURLUPP](#) (page 64) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRUnregisterURLToFSRefUPP](#) (page 66) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRUnregisterWasCFURLVisitedUPP](#) (page 67) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRNewCFURLUPP](#) (page 73) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRNewURLUPP](#) (page 73) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRURLToFSRefUPP](#) (page 74) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRURLToFSSpecUPP](#) (page 74) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRWasCFURLVisitedUPP](#) (page 75) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [InvokeHRWasURLVisitedUPP](#) (page 75) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [NewHRNewCFURLUPP](#) (page 76) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [NewHRURLToFSRefUPP](#) (page 77) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [NewHRWasCFURLVisitedUPP](#) (page 78) **Deprecated in Mac OS X v10.4**
(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Miscellaneous

- [HRSetEmbeddingControl](#) (page 60) **Deprecated in Mac OS X v10.4**
Sets the `controlRef` for embedding controls. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)
- [HRSetWindowRef](#) (page 64) **Deprecated in Mac OS X v10.4**
Sets the controlling window. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Functions

HRHTMLRenderingLibAvailable

Reports whether the HTML Rendering Library is available. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
pascal Boolean HRHTMLRenderingLibAvailable
```

Return Value

Returns `true` if the HTML Rendering Library is available; returns `false` otherwise.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

Callbacks

HRNewCFURLProcPtr

(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef OSStatus (*HRNewCFURLProcPtr)
(
    CFURLRef url,
    CFStringRef targetString,
    Boolean addToHistory,
    void * refCon
);
```

If you name your function `MyHRNewCFURLProc`, you would declare it like this:

```
OSStatus MyHRNewCFURLProc (
    CFURLRef url,
    CFStringRef targetString,
    Boolean addToHistory,
    void * refCon
);
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRNewURLProcPtr

An application-defined function that tracks newly visited links. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef OSStatus (*HRNewURLProcPtr) (
    const char * url,
    const char * targetFrame,
    Boolean addToHistory,
    void * refCon
);
```

If you name your function `MyHRNewURLProc`, you would declare it like this:

```
OSStatus MyHRNewURLProc (
    const char * url,
    const char * targetFrame,
    Boolean addToHistory,
    void * refCon
);
```

Parameters

url

A pointer to a C string containing the URL of the link.

targetFrame

A pointer to a C string containing the name of the target frame.

addToHistory

The HTML Rendering Library passes `true` in this parameter to indicate that you should add this link to a link-tracking history. It is up to your application to do any link-tracking.

refCon

An arbitrary value set by your application. This value is passed by your application when you call the function [HRRegisterNewURLUPP](#) (page 53) and passed back when the HTML Rendering Library calls your `MyNewURLProc` function. You may find this value useful for referring to an object instance or a structure, for example.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

You may find this function useful for maintaining a history list, for example. The sequence of steps required to implement an application-defined function to track visited links is as follows:

1. Obtain a UPP for your application-defined function by calling the function [NewHRNewURLUPP](#) (page 76).
2. Register your application-defined function by passing the UPP to the function [HRRegisterNewURLUPP](#) (page 53).

3. When the HTML Rendering Library calls your application-defined function, take note of the URL being visited.

When you are done using your application-defined function:

1. Unregister your application-defined function by calling the function [HRUnregisterNewURLUPP](#) (page 65).
2. Dispose of the UPP by calling the function [DisposeHRNewURLUPP](#) (page 25).

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRURLToFSRefProcPtr

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef OSStatus (*HRURLToFSRefProcPtr)
(
    CFStringRef rootString,
    CFStringRef linkString,
    FSRef * fref,
    URLSourceType urlSourceType,
    void * refCon
);
```

If you name your function `MyHRURLToFSRefProc`, you would declare it like this:

```
OSStatus MyHRURLToFSRefProc (
    CFStringRef rootString,
    CFStringRef linkString,
    FSRef * fref,
    URLSourceType urlSourceType,
    void * refCon
);
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRURLToFSSpecProcPtr

Converts URL data to a file system specification. **(Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)


```
typedef OSStatus (*HRURLToFSSpecProcPtr)
(
    const char * rootURL,
    const char * linkURL,
    FSSpec * fsspec,
    URLSourceType urlSourceType,
    void * refCon
);
```

If you name your function `MyHRURLToFSSpecProc`, you would declare it like this:

```
OSStatus MyHRURLToFSSpecProc (
    const char * rootURL,
    const char * linkURL,
    FSSpec * fsspec,
    URLSourceType urlSourceType,
    void * refCon
);
```

Parameters

rootURL

A pointer to a C string containing the root URL of the file to be loaded.

linkURL

A pointer to a C string containing the link URL of the file to be loaded.

fsspec

A pointer to a file system specification record (`FSSpec`) that you use to specify the file to which the HTML Rendering Library redirects the user.

urlSourceType

The HTML Rendering Library passes one of the following constants to indicate the type of file being searched for:

- `kHRLookingForHTMLSource` indicates that the file is an HTML source document.
- `kHRLookingForImage` indicates that the file is an image.
- `kHRLookingForEmbedded` indicates that the file is an embedded object, such as a QuickTime movie.
- `kHRLookingForImageMap` indicates that the file is an HTML image map.
- `kHRLookingForFrame` indicates that the file is an HTML frameset.

refCon

An arbitrary value set by your application. This value is passed by your application when you call the function and passed back when the HTML Rendering Library calls your `MyHRURLToFSSpecProc` function. You may find this value useful for referring to an object instance or a structure, for example.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

This function may be useful if you want to redirect certain URL’s to application-specific files, for example. The sequence of steps required to implement an application-defined function to intercept URL’s is as follows:

1. Obtain a UPP for your application-defined function by calling the function `NewHRURLToFSSpecUPP` (page 78).

2. Register your application-defined function by passing the UPP to the function [HRRegisterURLToFSSpecUPP](#) (page 55).
3. Respond when the HTML Rendering Library calls your application-defined function.

When you are done with your application-defined function:

1. Unregister your application-defined function by calling the function [HRUnregisterURLToFSSpecUPP](#) (page 66).
2. Dispose of the UPP by calling the function [DisposeHRURLToFSSpecUPP](#) (page 26).

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRWasCFURLVisitedProcPtr

(**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef Boolean (*HRWasCFURLVisitedProcPtr)
(
    CFURLRef url,
    void * refCon
);
```

If you name your function `MyHRWasCFURLVisitedProc`, you would declare it like this:

```
Boolean MyHRWasCFURLVisitedProc (
    CFURLRef url,
    void * refCon
);
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRWasURLVisitedProcPtr

Keeps track of whether a given URL has been previously visited. (**Deprecated.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef Boolean (*HRWasURLVisitedProcPtr)
(
    const char * url,
    void * refCon
);
```

If you name your function `MyHRWasURLVisitedProc`, you would declare it like this:

```
Boolean MyHRWasURLVisitedProc (
    const char * url,
    void * refCon
);
```

Parameters

url

A pointer to a C string containing the URL of the link.

refCon

An arbitrary value set by your application. This value is passed by your application when you call the function and passed back when the HTML Rendering Library calls your `MyHRWasURLVisitedProc` function. You may find this value useful for referring to an object instance or a structure, for example.

Return Value

If the given URL was previously visited, your application-defined function should return `true`. If the given URL was not previously visited, your application-defined function should return `false`.

Discussion

The sequence of steps required to implement an application-defined function to handle previously visited links is as follows:

1. Obtain a UPP for your application-defined function by calling the function [NewHRWasURLVisitedUPP](#) (page 79).
2. Register your application-defined function by passing the UPP to the function [HRRegisterWasURLVisitedUPP](#) (page 56).
3. Respond when the HTML Rendering Library calls your application-defined function.

When you are done using your application-defined function:

1. Unregister your application-defined function by calling the function [HRUnregisterWasURLVisitedUPP](#) (page 67).
2. Dispose of the UPP by calling the function [DisposeHRWasURLVisitedUPP](#) (page 28).

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

Data Types

HRNewCFURLUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRNewCFURLProcPtr HRNewCFURLUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRNewURLUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRNewURLProcPtr HRNewURLUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRReference

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef struct OpaqueHRReference * HRReference;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRURLToFSRefUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRURLToFSRefProcPtr HRURLToFSRefUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRURLToFSSpecUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRURLToFSSpecProcPtr HRURLToFSSpecUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRWasCFURLVisitedUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRWasCFURLVisitedProcPtr HRWasCFURLVisitedUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

HRWasURLVisitedUPP

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef HRWasURLVisitedProcPtr HRWasURLVisitedUPP;
```

Availability

Available in Mac OS X v10.0 and later.

Declared In

HTMLRendering.h

Constants

Scrollbar State

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef SInt16 HRScrollbarState;
enum {
    eHRScrollbarOn = 0,
    eHRScrollbarOff = 1,
    eHRScrollbarAuto = 2
};
```

Constants

eHRScrollbarOn

Tells the HTML Rendering Library to draw scrollbars at all times. If the data does not fill the current view, the scroll bars are inactive.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

eHRScrollbarOff

Tells the HTML Rendering Library never to draw scrollbars. You may find this option useful if the HTML rendering area you specify does not extend to the edge of a window.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

eHRScrollbarAuto

Tells the HTML Rendering Library to draw scrollbars as needed. This is the default setting.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

Renderer HTML Type

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
enum {
    kHRRendererHTML32Type = 'ht32'
};
```

URL Source Type

(Deprecated. Use Web Kit instead; see *WebKit Objective-C Programming Guide*. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
typedef UInt16 URLSourceType;
enum {
    kHRLookingForHTMLSource = 1,
    kHRLookingForImage = 2,
    kHRLookingForEmbedded = 3,
    kHRLookingForImageMap = 4,
    kHRLookingForFrame = 5
};
```

Constants

kHRLookingForHTMLSource

Indicates that the file is an HTML source document.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

`kHRLookingForImage`

Indicates that the file is an image.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

`kHRLookingForEmbedded`

Indicates that the file is an embedded object, such as a QuickTime movie.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

`kHRLookingForImageMap`

Indicates that the file is an HTML image map.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

`kHRLookingForFrame`

Indicates that the file is an HTML frameset.

Available in Mac OS X v10.0 and later.

Declared in `HTMLRendering.h`.

Result Codes

The most common result codes returned by HTML Rendering Library are listed in the table below. HTML Rendering Library may also return codes `noErr` (0), and `paramErr` (-50).

Result Code	Value	Description
<code>hrHTMLRenderingLibNotInstalledErr</code>	-5360	The HTML Rendering Library is not available. Available in Mac OS X v10.0 and later.
<code>hrMiscellaneousExceptionErr</code>	-5361	An unexpected exception occurred. Available in Mac OS X v10.0 and later.
<code>hrUnableToResizeHandleErr</code>	-5362	Unable to resize a handle to the required size. Available in Mac OS X v10.0 and later.

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

A function identified as deprecated has been superseded and may become unsupported in the future.

Deprecated in Mac OS X v10.4

DisposeHRNewCFURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void DisposeHRNewCFURLUPP (
    HRNewCFURLUPP userUPP
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

DisposeHRNewURLUPP

Disposes of a previously obtained UPP. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void DisposeHRNewURLUPP (
    HRNewURLUPP userUPP
);
```

Parameters

userUPP

A Universal Procedure Pointer (UPP) that you previously obtained by calling the function [NewHRNewURLUPP](#) (page 76).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

DisposeHRURLToFSRefUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void DisposeHRURLToFSRefUPP (  
    HRURLToFSRefUPP userUPP  
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

DisposeHRURLToFSSpecUPP

Disposes of a previously obtained UPP. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
void DisposeHRURLToFSSpecUPP (  
    HRURLToFSSpecUPP userUPP  
);
```

Parameters

userUPP

A Universal Procedure Pointer (UPP) that you previously obtained by calling the function [NewHRURLToFSSpecUPP](#) (page 78).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

DisposeHRWasCFURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void DisposeHRWasCFURLVisitedUPP (  
    HRWasCFURLVisitedUPP userUPP  
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

DisposeHRWasURLVisitedUPP

Disposes of a previously obtained UPP. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void DisposeHRWasURLVisitedUPP (
    HRWasURLVisitedUPP userUPP
);
```

Parameters

userUPP

A Universal Procedure Pointer (UPP) that you previously obtained by calling the function [NewHRWasURLVisitedUPP](#) (page 79).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRActivate

Activates the window associated with a given HRReference. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRActivate (
    HRReference hrRef
);
```

Parameters

hrRef

An HRReference value previously obtained by your application.

Return Value

A result code. See ["HTML Rendering Library Result Codes"](#) (page 23).

Discussion

Call this function whenever the window associated with a given HRReference becomes active. This allows the HTML Rendering Library to activate scrollbars and handle events as appropriate.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very

quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRDeactivate

Deactivates the window associated with a given `HRReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRDeactivate (
    HRReference hrRef
);
```

Parameters

hrRef

An `HRReference` value previously obtained by your application.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

Call this function whenever the window associated with a given `HRReference` becomes inactive.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRDisposeReference

Disposes of a previously obtained `HRReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRDisposeReference (
    HRReference hrRef
);
```

Parameters*hrRef*

An `HRReference` value previously obtained by your application.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

`HTMLRendering.h`

HRDraw

Updates a specified region for a given `HRReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see [WebKit Objective-C Programming Guide](#).)

```
OSStatus HRDraw (
    HRReference hrRef,
    RgnHandle updateRgnH
);
```

Parameters*hrRef*

An `HRReference` value previously obtained by your application.

updateRgnH

A handle of type `RgnHandle`. This handle specifies the region that you want the HTML Rendering Library to update. Specify the region in the `GrafPort`'s local coordinates. If you pass `NULL`, the HTML Rendering Library updates the entire rectangle you previously specified with the function [HRSetRenderingRect](#) (page 62).

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

Be sure to specify the dimensions of the rendering area by calling the function [HRSetRenderingRect](#) (page 62) at least once before you call the `HRDraw` function.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRDrawInPort

Updates a specified region for a given HRReference. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRDrawInPort (
    HRReference hrRef,
    RgnHandle updateRgnH,
    CGrafPtr grafPtr
);
```

Parameters

hrRef

A reference to the renderer object.

updateRgnH

The region to be updated.

grafPtr

A graf pointer to render HTML into.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

All the drawing will now happen in the specified port. This is the API you want to use to draw in an offscreen port, for example when printing. You could also use this API to draw in an on screen port.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRForceQuickdraw

Forces all images to be drawn with QuickDraw. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRForceQuickdraw (
    HReference hrRef,
    Boolean forceQuickdraw
);
```

Parameters

hrRef

An HReference value previously obtained by your application.

forceQuickdraw

Pass a value of true in this parameter to force all images to be drawn with QuickDraw.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

This function may be useful when working with print drivers that require QuickDraw for image capturing.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRFreeMemory

Attempts to release cache memory for use by your application. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
SInt32 HRFreeMemory (
    Size inBytesNeeded
);
```

Parameters

inBytesNeeded

A value indicating how many bytes of cache memory your application desires to obtain.

Return Value

A value indicating how many bytes of cache memory the HTML Rendering Library makes available to your application.

Discussion

Call the `HRFreeMemory` function to flush images and movies from the HTML Rendering Library cache. Be sure to check the function result to determine whether sufficient memory was made available to your application.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetBaseURL

Obtains the base URL of a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see [WebKit Objective-C Programming Guide](#).)

```
OSStatus HRGetBaseURL (
    HRReference hrRef,
    Handle baseURLH
);
```

Parameters

hrRef

A `HRReference` value previously obtained by your application.

baseURLH

A handle. Make sure you allocate a valid handle with the `NewHandle` function. On return, this handle (which may be resized) references a C string containing the root URL of the given file. If the current page does not contain a `BASE` tag, the handle is empty.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

The URL returned by this function begins with 'file:///'.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetBaseURLAsCFString

Obtains the base URL of a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetBaseURLAsCFString (
    HReference hrRef,
    CFStringRef *baseString
);
```

Parameters

hrRef

A HReference value previously obtained by your application.

baseString

On return, this handle references a CFString containing the root URL of the given file.

Return Value

A result code. See *"HTML Rendering Library Result Codes"* (page 23).

Discussion

Use these API from a Carbon application instead of using *HRGetRootURL* (page 40), *HRGetBaseURL* (page 33), *HRGetHTMLURL* (page 37), *HRGetTitle* (page 41) and *HRGetHTMLFile* (page 35). These APIs are same in behavior with their old counter parts. The only difference is that they take CFString, CFURLRef, and FSRef as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetHTMLFile

Obtains a file system specification record for a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetHTMLFile (
    HRRreference hrRef,
    FSSpec *fsspec
);
```

Parameters

hrRef

An HRRreference value previously obtained by your application.

fsspec

A pointer to a file system specification record (FSSpec). On return, the FSSpec contains file specification data for the page specified in the *hrRef* parameter.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetHTMLFileAsFSRef

Obtains an FSRef for a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGetHTMLFileAsFSRef (
    HReference hrRef,
    FSRef *fref
);
```

Parameters*hrRef*

An HReference value previously obtained by your application.

fref

A pointer to an (FSRef). On return, the FSRef contains file specification data for the page specified in the hrRef parameter.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using HRGetRootURL (page 40), HRGetBaseURL (page 33), HRGetHTMLURL (page 37), HRGetTitle (page 41) and HRGetHTMLFile (page 35). These APIs are same in behavior with their old counter parts. The only difference is that they take CFString, CFURLRef, and FSRef as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See Accessing the Web Kit From Carbon Applications for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetHTMLRenderingLibVersion

Identifies which version of the HTML Rendering Library is available. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetHTMLRenderingLibVersion (
    NumVersion *returnVers
);
```

Parameters*returnVers*

A pointer to a NumVersion structure. On return, this structure contains a value identifying the installed version of the HTML Rendering Library.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetHTMLURL

Obtains the URL for a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetHTMLURL (
    HReference hrRef,
    Handle HTMLURLH
);
```

Parameters

hrRef

An HReference value previously obtained by your application.

HTMLURLH

A handle. Make sure you allocate a valid handle with the `NewHandle` function. On return, this handle (which may be resized) references a C string containing the URL of the given file.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetHTMLURLAsCFURL

Obtains the URL for a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetHTMLURLAsCFURL (
    HReference hrRef,
    CFURLRef *theURL
);
```

Parameters

hrRef

An HReference value previously obtained by your application.

theURL

On return, this references a CFURL containing the URL of the given file.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using [HRGetRootURL](#) (page 40), [HRGetBaseURL](#) (page 33), [HRGetHTMLURL](#) (page 37), [HRGetTitle](#) (page 41) and [HRGetHTMLFile](#) (page 35). These APIs are same in behavior with their old counter parts. The only difference is that they take CFString, CFURLRef, and FSRef as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetRenderedImageSize

Reports the size of the rendered image. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetRenderedImageSize (
    HReference hrRef,
    Point *renderingSize
);
```

Parameters

hrRef

An HReference value previously obtained by your application.

renderingSize

A pointer to a value of type `Point`. On return, the HTML Rendering Library uses this value to report the size of the entire HTML page; that is, the smallest rectangle that fully encloses the entire rendered page (as drawn without scrollbars).

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

The HTML Rendering Library attempts to limit the width of the rendered page to the width of the rectangle you specify by calling the function `HRSetRenderingRect` (page 62). The length of the page is calculated based on the resulting width.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

`HTMLRendering.h`

HRGetRenderedImageSize32

Reports the size of the rendered image. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetRenderedImageSize32 (
    HRReference hrRef,
    UInt32 *height,
    UInt32 *width
);
```

Parameters

hrRef

A reference to the renderer object.

height

On return, the height of the image.

width

On return, the width of the image.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use this API when the rendered image could have coordinates larger than what `SInt16` can hold.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetRootURL

Obtains the root URL for all relative links on a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetRootURL (
    HReference hrRef,
    Handle rootURLH
);
```

Parameters

hrRef

An HReference value previously obtained by your application.

rootURLH

A handle. Make sure you allocate a valid handle with the `NewHandle` function. On return, this handle (which may be resized) references a C string containing the root URL of the given file.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

The root URL is normally the URL of the page specified in the `hrRef` parameter, unless the page contains a `<BASE>` tag specifying a different root URL.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetRootURLAsCFString

Obtains the root URL for all relative links on a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetRootURLAsCFString (
    HReference hrRef,
    CFStringRef *rootString
);
```

Parameters*hrRef*

An HReference value previously obtained by your application.

rootString

On return, this references a CFString containing the root URL of the given file.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using [HRGetRootURL](#) (page 40), [HRGetBaseURL](#) (page 33), [HRGetHTMLURL](#) (page 37), [HRGetTitle](#) (page 41) and [HRGetHTMLFile](#) (page 35). These APIs are same in behavior with their old counter parts. The only difference is that they take CFString, CFURLRef, and FSRef as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetTitle

Obtains the title of a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGetTitle (
    HRRreference hrRef,
    StringPtr title
);
```

Parameters*hrRef*

An HRRreference value previously obtained by your application.

title

A StringPtr. On return, the HTML Rendering Library stores the contents of the TITLE tag of the given page in the referenced string.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

This function converts any HTML entities into Mac OS characters before storing them in the string specified in the *title* parameter.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See Accessing the Web Kit From Carbon Applications for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGetTitleAsCFString

Obtains the title of a given HTML page. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGetTitleAsCFString (
    HRRreference hrRef,
    CFStringRef *title
);
```

Parameters*hrRef*

An HRRreference value previously obtained by your application.

title

A CFStringRef. On return, the HTML Rendering Library stores the contents of the TITLE tag of the given page in the referenced string.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using [HRGetRootURL](#) (page 40), [HRGetBaseURL](#) (page 33), [HRGetHTMLURL](#) (page 37), [HRGetTitle](#) (page 41) and [HRGetHTMLFile](#) (page 35). These APIs are same in behavior with their old counter parts. The only difference is that they take `CFString`, `CFURLRef`, and `FSRef` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToAnchor

Specifies an HTML anchor to scroll into view. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGoToAnchor (
    HRRreference hrRef,
    const char *anchorName
);
```

Parameters

hrRef

An `HRRreference` value previously obtained by your application.

anchorName

A pointer to a C string containing the name of an anchor on the current HTML page.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

Note that anchors are case sensitive.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToAnchorCFString

Specifies an HTML anchor to scroll into view. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGoToAnchorCFString (
    HRReference hrRef,
    CFStringRef anchorName
);
```

Parameters

hrRef

A reference to the renderer object.

anchorName

The name of the anchor to display.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these functions instead of using the functions [HRGoToFile](#) (page 46), [HRGoToURL](#) (page 49), [HRGoToAnchor](#) (page 43) and [HRGoToPtr](#) (page 48). These functions are the same in behavior with their old counter parts. The only difference is that they take `FSRef`, `CFURLRef`, `CFString`, and `CFData` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToCFURL

Renders a local file specified as a URL. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRGoToCFURL (
    HReference hrRef,
    CFURLRef url,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters

hrRef

A reference to the renderer object.

url

A reference to the URL to render.

addToHistory

Pass `true` if this file URL should be added to the history.

forceRefresh

Pass `true` if the rendering area should be refreshed.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these functions instead of using the functions [HRGoToFile](#) (page 46), [HRGoToURL](#) (page 49), [HRGoToAnchor](#) (page 43) and [HRGoToPtr](#) (page 48). These functions are the same in behavior with their old counter parts. The only difference is that they take `FSRef`, `CFURLRef`, `CFString`, and `CFData` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToData

Specifies HTML data for rendering. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGoToData (
    HRReference hrRef,
    CFDataRef data,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters*hrRef*

A reference to the renderer object.

data

A reference to data in the memory to render.

*addToHistory*Pass `true` if this file URL should be added to the history.*forceRefresh*Pass `true` if the rendering area should be refreshed.**Return Value**

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these functions instead of using the functions [HRGoToFile](#) (page 46), [HRGoToURL](#) (page 49), [HRGoToAnchor](#) (page 43) and [HRGoToPtr](#) (page 48). These functions are the same in behavior with their old counter parts. The only difference is that they take `FSRef`, `CFURLRef`, `CFString`, and `CFData` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToFile

Specifies an HTML file for rendering. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGoToFile (
    HRReference hrRef,
    const FSSpec *fsspec,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters*hrRef*

An `HRReference` value previously obtained by your application.

fsspec

A pointer to a file system specification record (`FSSpec`) for the HTML file that you wish to have rendered by the HTML Rendering Library.

addToHistory

Pass `true` in this parameter if you wish to have this file added to the list of visited links.

forceRefresh

Pass `true` in this parameter if you wish to force a screen update.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

Note that the HTML Rendering Library calls your `HRNewURLProcPtr` (page 15) application-defined function (if you use one) with this `FSSpec`. If you need to pass a URL instead of an `FSSpec`, use the function `HRGoToURL` (page 49).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToFSRef

Renders a set of HTML data from a specified buffer. (**Deprecated in Mac OS X v10.4.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGoToFSRef (
    HRReference hrRef,
    const FSRef *fref,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters*hrRef*

A reference to the renderer object.

fref

A reference to the HTML file that is to be opened and rendered.

*addToHistory*Pass `true` if this file URL should be added to the history.*forceRefresh*Pass `true` if the rendering area should be refreshed.**Return Value**A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).**Discussion**

Use these functions instead of using the functions [HRGoToFile](#) (page 46), [HRGoToURL](#) (page 49), [HRGoToAnchor](#) (page 43) and [HRGoToPtr](#) (page 48). These functions are the same in behavior with their old counter parts. The only difference is that they take `FSRef`, `CFURLRef`, `CFString`, and `CFData` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToPtr

Renders a set of HTML data from a specified buffer. (**Deprecated in Mac OS X v10.4.** Use Web Kit instead; see [WebKit Objective-C Programming Guide](#).)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGoToPtr (
    HRReference hrRef,
    char *buffer,
    UInt32 bufferSize,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters*hrRef*

An HRReference value previously obtained by your application.

buffer

A pointer to a buffer containing HTML data.

bufferSize

A value specifying the number of bytes in the buffer.

addToHistory

Pass `true` in this parameter if you wish to have this data added to the list of visited links.

forceRefresh

Pass `true` in this parameter if you wish to force a screen update.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

The HTML Rendering Library displays the HTML source data pointed to by the handle. It does not copy the handle, so you should not dispose of it until you are sure you no longer need it. Note that any relative links you specify in the HTML data are relative to your application, as the HTML data has no associated URL.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRGoToURL

Renders a local file specified as a URL. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRGoToURL (
    HRReference hrRef,
    const char *url,
    Boolean addToHistory,
    Boolean forceRefresh
);
```

Parameters*hrRef*

An HRReference value previously obtained by your application.

url

A pointer to a C string containing a Universal Resource Locator (URL).

addToHistory

Pass `true` in this parameter if you wish to have this file added to the list of visited links.

forceRefresh

Pass `true` in this parameter if you wish to force a screen update.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use this function for rendering local files. The URL should begin with `'file:///'`. Note that the HTML Rendering Library calls your `HRNewURLProcPtr` (page 15) application-defined function (if you use one) with this URL. If you need to pass an `FSSpec` instead of a URL, use the function `HRGoToURL` (page 49).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRIsHREvent

Gives the HTML Rendering Library an opportunity to handle events. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
Boolean HRIshREvent (
    const EventRecord *eventRecord
);
```

Parameters

eventRecord

A pointer to an `EventRecord`.

Return Value

Returns `true` if the HTML Rendering Library handles the specified event; returns `false` otherwise.

Discussion

Call the `HRIshREvent` function with every event received by your application. This ensures that the HTML Rendering Library has an opportunity to handle user clicks and cursor changes.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRNewReference

Obtains a new `HRReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRNewReference (
    HRReference *hrRef,
    OSType rendererType,
    GrafPtr grafPtr
);
```

Parameters

hrRef

A pointer to a `HRReference` value. On return, your application uses this value to call other functions in the HTML Rendering Library.

rendererType

A value of type `OSType` identifying the type of HTML renderer available. Currently, the constant `kHRRendererHTML32Type` is the only value you may pass in this parameter.

grafPtr

A pointer to a valid `GrafPort`.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

When your application has no further need for a particular `HRReference`, dispose of it by calling the function `HRDisposeReference` (page 29).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

`HTMLRendering.h`

HRNewReferenceInWindow

Obtains a new `HRReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRNewReferenceInWindow (
    HRReference *hrRef,
    OSType rendererType,
    WindowRef inWindowRef
);
```

Parameters

hrRef

A pointer to the new reference created and returned by the renderer.

rendererType

The type of the renderer—for example `kHRRendererHTML32Type`. Only this type is supported for now.

inWindowRef

A reference to the window for which rendering area will be specified.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

All the controls created by the HTML renderer will be embedded in the root control of the window specified by the window reference.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very

quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterNewCFURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRRegisterNewCFURLUPP (
    HRNewCFURLUPP inURLUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterNewURLUPP

Registers an application-defined function that handles newly visited links. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
void HRRegisterNewURLUPP (
    HRNewURLUPP inNewURLUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Parameters*inNewURLUPP*

A Universal Procedure Pointer (UPP). You obtain this UPP by calling the function [NewHRNewURLUPP](#) (page 76).

hrRef

An HRReference value previously obtained by your application.

inRefCon

An arbitrary value set by your application. This value is passed by your application when you call the HRRegisterNewURLUPP function and passed back when the HTML Rendering Library calls your function [HRNewURLProcPtr](#) (page 15). You may find this value useful for referring to an object instance or a structure, for example.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterURLToFSRefUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRRegisterURLToFSRefUPP (
    HRURLToFSRefUPP inURLToFSRefUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterURLToFSSpecUPP

Registers an application-defined function that handles previously visited links. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRRegisterURLToFSSpecUPP (
    HRURLToFSSpecUPP inURLToFSSpecUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Parameters

inURLToFSSpecUPP

A Universal Procedure Pointer (UPP). You obtain this UPP by calling the function [NewHRURLToFSSpecUPP](#) (page 78).

hrRef

An HRReference value previously obtained by your application.

inRefCon

An arbitrary value set by your application. This value is passed by your application when you call the HRRegisterURLToFSSpecUPP function and passed back when the HTML Rendering Library calls your function [HRURLToFSSpecProcPtr](#) (page 16). You may find this value useful for referring to an object instance or a structure, for example.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterWasCFURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
void HRRegisterWasCFURLVisitedUPP (
    HRWasCFURLVisitedUPP inWasCFURLVisitedUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRRegisterWasURLVisitedUPP

Registers an application-defined function that handles previously visited links. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRRegisterWasURLVisitedUPP (
    HRWasURLVisitedUPP inWasURLVisitedUPP,
    HRReference hrRef,
    void *inRefCon
);
```

Parameters

inWasURLVisitedUPP

A Universal Procedure Pointer (UPP). You obtain this UPP by calling the function [NewHRWasURLVisitedUPP](#) (page 79).

hrRef

An HRReference value previously obtained by your application.

inRefCon

An arbitrary value set by your application. This value is passed by your application when you call the function and passed back when the HTML Rendering Library calls your `MyHRWasURLVisitedProc` function. You may find this value useful for referring to an object instance or a structure, for example.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRScreenConfigurationChanged

Notifies the HTML Rendering Library that the screen depth has changed. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRScreenConfigurationChanged (
    void
);
```

Discussion

Call the `HRScreenConfigurationChanged` function every time the screen depth changes or the user's monitor configuration changes. This allows the HTML Rendering Library to redraw correctly.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRScrollToImageLocation32

Scrolls to a specified view of the HTML rendering area. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRScrollToImageLocation32 (
    HReference hrRef,
    SInt32 h,
    SInt32 v
);
```

Parameters

hrRef

A reference to the renderer object.

h

The horizontal location.

v

The vertical location.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use this API when specifying a location to scroll to. Location is specified in image space.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRScrollToLocation

Scrolls to a specified view of the HTML rendering area. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRScrollToLocation (
    HRReference hrRef,
    Point *location
);
```

Parameters*hrRef*

An HRReference value previously obtained by your application.

*location*A pointer to a value of type `Point`. Your application uses this value to specify the upper left corner of the visible portion of the rendering area.**Return Value**

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

The HTML Rendering Library limits scrolling to the available rendering area.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very

quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetDrawBorder

Specifies whether to draw a border around the rendering area. (**Deprecated in Mac OS X v10.4.** Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetDrawBorder (
    HRReference hrRef,
    Boolean drawBorder
);
```

Parameters

hrRef

An HRReference value previously obtained by your application.

drawBorder

If you pass `true`, the HTML Rendering Library draws a border around the rendering area. If you pass `false`, the HTML Rendering Library draws the rendering area without a border. The default setting is `false`.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

You may use this optional function to specify whether a border is drawn around the rendering area. This might be useful when you specify a rendering area in a window containing other elements, for example. The default setting is to render without a border.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetEmbeddingControl

Sets the `ControlRef` for embedding controls. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetEmbeddingControl (
    HReference hrRef,
    ControlRef controlRef
);
```

Parameters

hrRef

A reference to the renderer object.

controlRef

All the future controls created by renderer are embedded in this `controlRef`.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use this API to tell the HTML Renderer to embed all the controls it has created so far and the new controls it creates after this call in the given control. This is particularly useful if you wish to have HTML displayed within your dialog. For example, Software Update needs this.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetGrafPtr

Sets a new `GrafPort` for a given `HReference`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetGrafPtr (
    HReference hrRef,
    GrafPtr grafPtr
);
```

Parameters

hrRef

An `HReference` value previously obtained by your application.

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

grafPtr

A pointer to a valid `GrafPort`. This value replaces any `GrafPort` previously specified for the given `HRReference`.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Call this function whenever the `GrafPort` changes for a given `HRReference`, as occurs during printing, for example. Be sure to call the `HRSetGrafPtr` function again to reset the original `GrafPort` when necessary.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

`HTMLRendering.h`

HRSetGrowboxCutout

Specifies whether to allow for a size box when drawing scrollbars. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetGrowboxCutout (
    HRReference hrRef,
    Boolean allowCutout
);
```

Parameters*hrRef*

An `HRReference` value previously obtained by your application.

allowCutout

If you pass `true` in this parameter, the HTML Rendering Library draws scroll bars that provide space for a size box. If you pass `false` in this parameter, the HTML Rendering Library draws scroll bars that extend all the way to the bottom right corner of the rendering area. The default setting is `false`.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

You may find it useful to specify a cutout for a size box if the HTML rendering area you specify extends to the lower right corner of a window. The default setting is to draw scrollbars without leaving room for a size box.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetRenderingRect

Specifies the boundaries of the HTML rendering area. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetRenderingRect (
    HRRreference hrRef,
    const Rect *renderingRect
);
```

Parameters

hrRef

An HRRreference value previously obtained by your application.

renderingRect

A pointer to a value of type Rect. This value specifies the boundaries of the HTML rendering area. Specify the boundaries in the GrafPort's port coordinates.

Return Value

A result code. See "HTML Rendering Library Result Codes" (page 23).

Discussion

The HTML Rendering Library draws all elements, including scroll bars, inside the area you specify with the function `HRSetRenderingRect` (page 62).

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetScrollbarState

Specifies how scrollbars are drawn. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetScrollbarState (  
    HReference hrRef,  
    HRScrollbarState hScrollbarState,  
    HRScrollbarState vScrollbarState  
);
```

Parameters*hrRef*

An HReference value previously obtained by your application.

hScrollbarState

A value of type HRScrollbarState. See [Scrollbar State](#) (page 21) for a list of the constants you may pass in this parameter.

vScrollbarState

A value of type HRScrollbarState. See [Scrollbar State](#) (page 21) for a list of the constants you may pass in this parameter.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

You can specify one of three values for scrollbars:

- `eHRScrollbarOn` tells the HTML Rendering Library to draw scrollbars at all times. If the data does not fill the current view, the scroll bars are inactive.
- `eHRScrollbarOff` tells the HTML Rendering Library never to draw scrollbars. You may find this option useful if the HTML rendering area you specify does not extend to the edge of a window.
- `eHRScrollbarAuto` tells the HTML Rendering Library to draw scrollbars as needed. This is the default setting.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRSetWindowRef

Sets the controlling window. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRSetWindowRef (
    HRReference hrRef,
    WindowRef windowRef
);
```

Parameters*hrRef*

A reference to the renderer object.

windowRef

A new reference to the window to be attached to the *hrRef*.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

All the controls created by the HTML renderer will be moved in the root control of the window specified by the window reference. All the drawing will now happen in the specified window.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterNewCFURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
void HRUnregisterNewCFURLUPP (  
    HRReference hrRef  
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterNewURLUPP

Unregisters a previously registered application-defined function. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRUnregisterNewURLUPP (  
    HRReference hrRef  
);
```

Parameters

hrRef

An HRReference value. You pass the same HRReference value that you passed to register the application-defined function.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterURLToFSRefUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRUnregisterURLToFSRefUPP (
    HRReference hrRef
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterURLToFSSpecUPP

Unregisters a previously registered application-defined function. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRUnregisterURLToFSSpecUPP (
    HRReference hrRef
);
```

Parameters

hrRef

An HRReference value. You pass the same HRReference value that you passed to register the application-defined function.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterWasCFURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRUnregisterWasCFURLVisitedUPP (
    HRReference hrRef
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUnregisterWasURLVisitedUPP

Unregisters a previously registered application-defined function. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
void HRUnregisterWasURLVisitedUPP (
    HRReference hrRef
);
```

Parameters

hrRef

An HRReference value. You pass the same HRReference value that you passed to register the application-defined function.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUtilCreateFullCFURL

Obtains a full URL from a given set of relative URLs. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRUtilCreateFullCFURL (
    CFStringRef rootString,
    CFStringRef linkString,
    CFURLRef *url
);
```

Parameters

rootString

A `CFStringRef` that refers to a `CFString` containing the root URL that the HTML Rendering Library will use to create the full URL. The root URL typically identifies an HTML source page.

linkString

A `CFStringRef` that refers to a `CFString` containing the link URL that the HTML Rendering Library will use to create the full URL. The link URL typically identifies a link being clicked on.

url

A `CFURLRef`. On return, this handle references a full URL created from the specified root URL and the specified link URL.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using `HRUtilCreateFullURL` (page 68), `HRUtilGetFSSpecFromURL` (page 70), and `HRUtilGetURLFromFSSpec` (page 72). These APIs are same in behavior with their old counter parts. The only difference is that they take `CFURLRef`, and `FSRef` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUtilCreateFullURL

Obtains a full URL from a given set of relative URLs. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRUtilCreateFullURL (
    const char *rootURL,
    const char *linkURL,
    Handle fullURLH
);
```

Parameters*rootURL*

A pointer to a C string containing the root URL that the HTML Rendering Library will use to create the full URL. The root URL typically identifies an HTML source page.

linkURL

A pointer to a C string containing the link URL that the HTML Rendering Library will use to create the full URL. The link URL typically identifies a link being clicked on.

fullURLH

A handle. On return, this handle references a full URL created from the specified root URL and the specified link URL. You must allocate this handle with the function `NewHandle` before calling `HRUtilCreateFullURL`. The HTML Rendering Library resizes the handle and terminates the C string with a NULL character.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

This function allows you to obtain a full URL to use when a relative URL is inappropriate. This might be useful when you need to pass a URL to another application, for example.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUtilGetFSRefFromURL

Obtains a `FSRef` from a given set of relative URL's. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see [WebKit Objective-C Programming Guide](#).)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRUtilGetFSRefFromURL (
    CFStringRef rootString,
    CFStringRef linkString,
    FSRef *destRef
);
```

Parameters*rootString*

A reference to a `CFString` containing the root URL that the HTML Rendering Library will use to create the full URL. The root URL typically identifies an HTML source page.

linkString

A reference to a `CFString` containing the link URL that the HTML Rendering Library will use to create the full URL. The link URL typically identifies a link being clicked on.

destRef

A pointer to a `FSRef`. On return, this points to the `FSRef` of the full URL calculated from the specified root url and the specified link URL.

Return Value

A result code. See [“HTML Rendering Library Result Codes”](#) (page 23).

Discussion

Use these API from a Carbon application instead of using [HRUtilCreateFullURL](#) (page 68), [HRUtilGetFSSpecFromURL](#) (page 70), and [HRUtilGetURLFromFSSpec](#) (page 72). These APIs are same in behavior with their old counter parts. The only difference is that they take `CFURLRef`, and `FSRef` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUtilGetFSSpecFromURL

Obtains a `FSSpec` from a given set of relative URL's. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see [WebKit Objective-C Programming Guide](#).)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus HRUtilGetFSSpecFromURL (
    const char *rootURL,
    const char *linkURL,
    FSSpec *destSpec
);
```

Parameters*rootURL*

A pointer to a C string containing the root URL that the HTML Rendering Library will use to create the full URL. The root URL typically identifies an HTML source page.

linkURL

A pointer to a C string containing the link URL that the HTML Rendering Library will use to create the full URL. The link URL typically identifies a link being clicked on.

destSpec

A pointer to a file system specification record (*FSSpec*). On return, this points to the *FSSpec* of the full URL calculated from the specified root url and the specified link URL.

Return Value

A result code. See “[HTML Rendering Library Result Codes](#)” (page 23).

Discussion

This function allows you to obtain an *FSSpec* to use when a relative URL is inappropriate. This might be useful for Apple events, for example

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

HRUtilGetURLFromFSRef

Obtains a full URL from a given *FSRef*. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRUtilGetURLFromFSRef (
    const FSRef *fileRef,
    CFURLRef *url
);
```

Parameters*fileRef*

A pointer to an existing *FSRef*.

url

A pointer to a `CFURLRef`. On return, the `CFURL` contains the URL of the given `FSSpec`.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

Use these API from a Carbon application instead of using `HRUtilCreateFullURL` (page 68), `HRUtilGetFSSpecFromURL` (page 70), and `HRUtilGetURLFromFSSpec` (page 72). These APIs are same in behavior with their old counter parts. The only difference is that they take `CFURLRef`, and `FSRef` as parameters.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

`HTMLRendering.h`

HRUtilGetURLFromFSSpec

Obtains a full URL from a given `FSSpec`. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus HRUtilGetURLFromFSSpec (
    const FSSpec *fsspec,
    Handle urlHandle
);
```

Parameters

fsspec

A pointer to an existing file system specification record (`FSSpec`).

urlHandle

A handle to a C string. On return, this C string contains the URL of the given `FSSpec`. You must allocate this handle with the function `NewHandle` before calling `HRUtilGetURLFromFSSpec`. The HTML Rendering Library resizes the handle and terminates the C string with a NULL character.

Return Value

A result code. See “HTML Rendering Library Result Codes” (page 23).

Discussion

This function allows you to obtain a URL from a given `FSSpec`. This might be useful when you have previously obtained an `FSSpec` and need to pass it to an application that requires URL data, for example.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later when running Mac OS 9 or later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

InvokeHRNewCFURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus InvokeHRNewCFURLUPP (
    CFURLRef url,
    CFStringRef targetString,
    Boolean addToHistory,
    void *refCon,
    HRNewCFURLUPP userUPP
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

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Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

InvokeHRNewURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus InvokeHRNewURLUPP (
    const char *url,
    const char *targetFrame,
    Boolean addToHistory,
    void *refCon,
    HRNewURLUPP userUPP
);
```

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

InvokeHRURLToFSRefUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
OSStatus InvokeHRURLToFSRefUPP (
    CFStringRef rootString,
    CFStringRef linkString,
    FSRef *fref,
    URLSourceType urlSourceType,
    void *refCon,
    HRURLToFSRefUPP userUPP
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

InvokeHRURLToFSSpecUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
OSStatus InvokeHRURLToFSSpecUPP (
    const char *rootURL,
    const char *linkURL,
    FSSpec *fsspec,
    URLSourceType urlSourceType,
    void *refCon,
    HRURLToFSSpecUPP userUPP
);
```

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

InvokeHRWasCFURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
Boolean InvokeHRWasCFURLVisitedUPP (
    CFURLRef url,
    void *refCon,
    HRWasCFURLVisitedUPP userUPP
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

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HTMLRendering.h

InvokeHRWasURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
Boolean InvokeHRWasURLVisitedUPP (
    const char *url,
    void *refCon,
    HRWasURLVisitedUPP userUPP
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRNewCFURLUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
HRNewCFURLUPP NewHRNewCFURLUPP (
    HRNewCFURLProcPtr userRoutine
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRNewURLUPP

Obtains a UPP for an application-defined function that handles newly visited links. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

Deprecated HTML Rendering Library Reference (Not Recommended) Functions

```
HRNewURLUPP NewHRNewURLUPP (
    HRNewURLProcPtr userRoutine
);
```

Parameters

userRoutine

A pointer to your application-defined function that handles newly visited links. For more information, see [HRNewURLProcPtr](#) (page 15).

Return Value

A Universal Procedure Pointer. You pass this pointer to the function [HRRegisterNewURLUPP](#) (page 53). See the description of the `HRNewURLUPP` data type.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRURLToFSRefUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
HRURLToFSRefUPP NewHRURLToFSRefUPP (
    HRURLToFSRefProcPtr userRoutine
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRURLToFSSpecUPP

Obtains a UPP for an application-defined function that intercepts URL's. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
HRURLToFSSpecUPP NewHRURLToFSSpecUPP (
    HRURLToFSSpecProcPtr userRoutine
);
```

Parameters

userRoutine

A pointer to your application-defined function that intercepts URL's. For more information, see the function [HRURLToFSSpecProcPtr](#) (page 16).

Return Value

A Universal Procedure Pointer. You pass this pointer to the function [HRRegisterURLToFSSpecUPP](#) (page 55). See the description of the `HRURLToFSSpecUPP` data type.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRWasCFURLVisitedUPP

(Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
HRWasCFURLVisitedUPP NewHRWasCFURLVisitedUPP (
    HRWasCFURLVisitedProcPtr userRoutine
);
```

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See *Accessing the Web Kit From Carbon Applications* for details.

Availability

Available in CarbonLib 1.3 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

NewHRWasURLVisitedUPP

Obtains a UPP for an application-defined function that handles previously visited links. (Deprecated in Mac OS X v10.4. Use Web Kit instead; see *WebKit Objective-C Programming Guide*.)

```
HRWasURLVisitedUPP NewHRWasURLVisitedUPP (  
    HRWasURLVisitedProcPtr userRoutine  
);
```

Parameters*userRoutine*

A pointer to your application-defined function that handles visited links. For more information, see the function [HRWasURLVisitedProcPtr](#) (page 18).

Return Value

A Universal Procedure Pointer. You pass this pointer to the function [HRRegisterWasURLVisitedUPP](#) (page 56). See the description of the `HRWasURLVisitedUPP` data type.

Special Considerations

Because the Web Kit takes a completely different approach to displaying HTML and web content from that used by the HTML Rendering Library, you cannot make a one-to-one substitution of Web Kit methods for HTML Rendering Library functions. However, the basic features of the Web Kit can be implemented very quickly, and Web Kit offers much greater capability than the HTML Rendering Library. Although the Web Kit is an Objective-C interface, you can call it from a Carbon application. See [Accessing the Web Kit From Carbon Applications](#) for details.

Availability

Available in CarbonLib 1.1 and later.

Available in Mac OS X 10.0 and later.

Deprecated in Mac OS X v10.4.

Declared In

HTMLRendering.h

Document Revision History

This table describes the changes to *HTML Rendering Library Reference*.

Date	Notes
2006-07-13	Updated for Mac OS X v10.5.
2006-07-24	Deprecated the library. Replaced by the Web Kit.
2003-01-01	Updated the EDD.
	Added comments from header file to new functions.
	Gave english names to constants and removed callback data types.
2002-02-01	Last version of this document.

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