Scrap Manager Reference

(Not Recommended)



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Scrap Manager Reference (Not Recommended)

Framework	Carbon/Carbon.h
Declared in	Scrap.h

Overview

Important The Scrap Manager is deprecated in Mac OS X version 10.5 and later. The replacement API is the Pasteboard Manager. For more information, see *Pasteboard Manager Programming Guide*.

In Mac OS 9 and earlier, the Scrap Manager allowed applications to copy and paste data using the Clipboard. The Scrap Manager was included in Carbon to facilitate the porting of legacy applications to Mac OS X. Only the LoadScrap and UnloadScrap functions were retained from the original Scrap Manager. However, the Carbon Scrap Manager provided new features, including support for promises.

The Pasteboard Manager supersedes the Scrap Manager and the drag flavor functionality in the Drag Manager, adding greater flexibility in the type and quantity of data to be transferred. Pasteboard Manager pasteboards are also fully compatible with Cocoa pasteboards.

You should not use the Scrap Manager in new application development.

Functions by Task

Getting Information About the Scrap

GetScrapFlavorCount (page 21) Deprecated in OS X v10.5

Obtains a scrap flavor count to use with the GetScrapFlavorInfoList function. (Deprecated. Use PasteboardCopyItemFlavors instead.)

GetScrapFlavorFlags (page 23) Deprecated in OS X v10.5

Obtains information about a specified scrap flavor. (Deprecated. Use PasteboardGetItemFlavorFlags instead.)

GetScrapFlavorInfoList (page 24) Deprecated in OS X v10.5

Fills an array with items which each describe a corresponding flavor in the scrap. (Deprecated. Use PasteboardCopyItemFlavors instead.)

Reading Information From the Scrap

GetCurrentScrap (page 19) Deprecated in OS X v10.5

Obtains a reference to the current scrap. (Deprecated. Use PasteboardCreate instead.)

GetScrapByName (page 19) Deprecated in OS X v10.5

Obtains a reference to a named scrap. (Deprecated. Use PasteboardCreate instead.)

GetScrapFlavorData (page 22) Deprecated in OS X v10.5

Obtains the data for the specified flavor from the specified scrap. (Deprecated. Use PasteboardCopyItemFlavorData instead.)

GetScrapFlavorSize (page 25) Deprecated in OS X v10.5

Obtains the size of the data for a specified flavor from a scrap. (Deprecated. Use PasteboardCopyItemFlavorData instead.)

Writing Information to the Scrap

ClearCurrentScrap (page 17) Deprecated in OS X v10.5

Clears the current scrap. (Deprecated. Use PasteboardClear instead.)

ClearScrap (page 17) Deprecated in OS X v10.5

Clears a given scrap. (Deprecated. Use PasteboardClear instead.)

PutScrapFlavor (page 28) Deprecated in OS X v10.5

Puts data on or promises data to the specified scrap. (Deprecated. Use PasteboardPutItemFlavor instead.)

Transferring Data Between the Scrap in Memory and the Scrap on Disk

LoadScrap (page 26) Deprecated in OS X v10.5

Reads the scrap from the scrap file into memory.

UnloadScrap (page 30) Deprecated in OS X v10.5

Writes the scrap from memory to the scrap file.

Working With Scrap Promise Keeper Functions

```
CallInScrapPromises (page 16) Deprecated in OS X v10.5
```

Forces all promised flavors to be supplied. (Deprecated. Use PasteboardResolvePromises instead.)

```
DisposeScrapPromiseKeeperUPP (page 18) Deprecated in OS X v10.5
```

Disposes of a universal procedure pointer to a function that provides promised scrap data.

```
InvokeScrapPromiseKeeperUPP (page 26) Deprecated in OS X v10.5
```

Calls a universal procedure pointer to a function that provides promised scrap data.

```
NewScrapPromiseKeeperUPP (page 27) Deprecated in OS X v10.5
```

Creates a new universal procedure pointer to a function that provides promised scrap data.

```
SetScrapPromiseKeeper (page 29) Deprecated in OS X v10.5
```

Associates an application-defined promise-keeper function with a scrap or removes an associated promise-keeper. (Deprecated. Use PasteboardSetPromiseKeeper instead.)

Callbacks

${\bf Scrap Promise Keeper Proc Ptr}$

Defines a pointer to a function the Scrap Manager calls to obtain promised scrap data for a specified flavor.

```
typedef OSStatus (*ScrapPromiseKeeperProcPtr)
(
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    void * userData);
```

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

```
OSStatus MyScrapPromiseKeeperCallback (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    void * userData);
```

Parameters

scrap

A reference to the scrap to which to supply the promised flavor data.

flavorType

The flavor type to supply the promised data for. Some scrap flavor types are described in "Scrap Flavor Types" (page 10).

userData

An untyped pointer to a buffer, local variable, or other storage location, created and disposed of by your application, and supplied to the Scrap Manager by a previous call to SetScrapPromiseKeeper (page 29). For example, this parameter might refer to a pointer or handle to some private scrap data which your promise-keeper function uses in fabricating one or more promised flavors.

This parameter may have a value of NULL.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

To provide a pointer to your promise-keeper function, you create a universal procedure pointer (UPP), using the function NewScrapPromiseKeeperUPP (page 27). You can do so with code similar to the following:

ScrapPromiseKeeperUPP MyPromiseKeeperUPP;

MyPromiseKeeperUPP = NewScrapPromiseKeeperUPP (&MyScrapPromiseKeeperCallback);

You can then associate the UPP with a scrap by passing MyScrapPromiseKeeperCallback as a parameter to the SetScrapPromiseKeeper (page 29) function.

If a promised flavor is requested through <code>GetScrapFlavorData</code> (page 22) or <code>GetScrapFlavorSize</code> (page 25), the Scrap Manager calls the application's <code>ScrapPromiseKeeperProcPtr</code> function. The scrap promise-keeper function should call <code>PutScrapFlavor</code> (page 28) as appropriate to fulfill its promises. Failure to do so—including returning an error or simply neglecting to keep a promise for a flavor—will result in errors being returned to corresponding callers of <code>GetScrapFlavorData</code> or <code>GetScrapFlavorSize</code>.

Under Mac OS X, the scrap promise-keeper function can be called during any call to GetScrapFlavorData or GetScrapFlavorSize. Under Mac OS 8 and 9, the Carbon Scrap Manager still must support non-Carbon callers of GetScrap, which does not know about promised flavors. As a result, the Carbon Scrap Manager must make sure all promises have been kept when the application is suspended.

It is okay to keep a promise without ever receiving a call to a scrap promise-keeper function. You should not call WaitNextEvent or any similar function from your promise-keeper function because the promise-keeper might be running at suspend event time.

After you are finished with a promise-keeper function, and have removed it by passing NULL to the SetScrapPromiseKeeper (page 29) function, you can dispose of the UPP with the DisposeScrapPromiseKeeperUPP (page 18) function. However, don't dispose of the UPP if any other scrap uses it or if you plan to use it again.

Availability

Available in OS X v10.0 and later.

Declared in

Scrap.h

Data Types

ScrapFlavorInfo

Describes a single flavor within a scrap.

```
struct ScrapFlavorInfo {
    ScrapFlavorType flavorType;
    ScrapFlavorFlags flavorFlags;
};
typedef struct ScrapFlavorInfo ScrapFlavorInfo;
```

Fields

flavorType

The flavor type for the flavor. Some values for flavor types are described in "Scrap Flavor Types" (page 10).

flavorFlags

The flavor flags for the flavor. Some values for flavor flags are described in "Scrap Flavor Flags" (page 11).

Availability

Available in OS X v10.0 and later.

Declared in

Scrap.h

ScrapRef

Defines a reference to a scrap.

typedef struct OpaqueScrapRef * ScrapRef;

Availability

Available in OS X v10.0 and later.

Declared in

Scrap.h

ScrapPromiseKeeperUPP

Defines a universal procedure pointer to a scrap promise—keeper function.

typedef ScrapPromiseKeeperProcPtr ScrapPromiseKeeperUPP;

Discussion

See ScrapPromiseKeeperProcPtr (page 6) for more information on scrap promise–keeper functions.

Availability

Available in OS X v10.0 and later.

Declared in

Scrap.h

ScrapFlavorType

Defines a scrap flavor type.

typedef FourCharCode ScrapFlavorType;

Discussion

Some values for scrap flavor types are shown in "Scrap Flavor Types" (page 10).

Availability

Available in OS X v10.0 and later.

Declared in

Scrap.h

Constants

Scrap Flavor Types

Identify commonly used scrap flavor types.

```
enum {
    kScrapFlavorTypePicture = 'PICT',
    kScrapFlavorTypeText = 'TEXT',
    kScrapFlavorTypeTextStyle = 'styl',
    kScrapFlavorTypeMovie = 'moov',
    kScrapFlavorTypeSound = 'snd ',
    kScrapFlavorTypeUnicode = 'utxt',
    kScrapFlavorTypeUnicodeStyle = 'ustl'
};
```

Constants

kScrapFlavorTypePicture

Specifies the contents of a PicHandle.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeText

Specifies a stream of text characters.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeTextStyle

Specifies a style scrap structure. For more information, see TEGetStyleScrapHandle in *Inside Mac OS X: TextEdit Reference*.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeMovie

Specifies a reference to a QuickTime movie.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeSound

Specifies the contents of a 'snd' resource. For more information, see the functions SndRecord and SndPlay in *Inside Mac OS X: Sound Manager Reference*.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeUnicode

Specifies a stream of 16-bit Unicode characters.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorTypeUnicodeStyle

Specifies Unicode style information; defined by ATSUI and used by Textension.

Available in OS X v10.0 and later.

Declared in Scrap.h.

Scrap Flavor Flags

Describe attributes of a scrap flavor.

```
enum {
    kScrapFlavorMaskNone = 0x00000000,
    kScrapFlavorMaskSenderOnly = 0x00000001,
    kScrapFlavorMaskTranslated = 0x00000002
};
typedef UInt32 ScrapFlavorFlags;
```

Constants

kScrapFlavorMaskNone

No flavors in the scrap.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorMaskSenderOnly

The flavor is intended to be visible to the sender only. This is typically used to save a private flavor into the scrap so that other public promised flavors can be derived from it on demand. If another process put a flavor with this flag on the scrap, your process will never see the flavor, so you do not need to test for this flag.

Available in OS X v10.0 and later.

Declared in Scrap.h.

kScrapFlavorMaskTranslated

The flavor has been translated (or will be translated when the promise is kept) from some other flavor in the scrap, either by the sender or by the Translation Manager.

Available in OS X v10.0 and later.

Declared in Scrap.h.

Discussion

To determine the attributes of a scrap flavor, call the GetScrapFlavorFlags (page 23) function.

Reserved Flavor Type

Identifies a flavor type reserved by the Scrap Manager.

```
enum {
    kScrapReservedFlavorType = 'srft'
};
```

Discussion

kScrapReservedFlavorType is a flavor type which is reserved for use by the Scrap Manager. If you pass it to the Scrap Manager, it will be rejected.

Unknown Flavor Data Size Constant

Indicates that the size of the scrap flavor data is unknown.

```
enum {
   kScrapFlavorSizeUnknown = -1
};
```

Discussion

When promising a scrap flavor, it is okay if you don't yet know how big the flavor data will be. In this case, pass kScrapFlavorSizeUnknown for the flavor data size.

Options for the GetScrapByName Function

Define options passed to the GetScrapByName function.

```
enum {
   kScrapGetNamedScrap = 0,
   kScrapClearNamedScrap = 0x00000001
};
```

Constants

kScrapGetNamedScrap

Get current named scrap without bumping or clearing the scrap.

Available in OS X v10.1 and later.

Declared in Scrap.h.

kScrapClearNamedScrap

Acquire the named scrap, bumping and clearing the scrap.

Available in OS X v10.1 and later.

Declared in Scrap.h.

Invalid Scrap Reference

Defines an invalid scrap reference.

```
#define kScrapRefNone ((ScrapRef)NULL)
```

Discussion

kScrapRefNone is guaranteed to be an invalid ScrapRef. This is convenient when initializing application variables.

Named Scraps

Specify Apple—defined scrap names for the GetScrapByName function.

```
#define kScrapClipboardScrap CFSTR("com.apple.scrap.clipboard")
#define kScrapFindScrap CFSTR("com.apple.scrap.find")
```

Constants

kScrapClipboardScrap

Traditional clipboard scrap.

Available in OS X v10.1 and later.

Declared in Scrap.h.

kScrapFindScrap

Compatible with Cocoa's global find scrap.

Available in OS X v10.1 and later.

Declared in Scrap.h.

Result Codes

The most common result codes returned by Scrap Manager are listed below.

Result Code	Value	Description
needClearScrapErr	-100	Scrap does not exist (same as noScrapErr)
		Available in OS X v10.0 and later.
noScrapErr	-100	Scrap does not exist (not initialized)
		Available in OS X v10.0 and later.
noTypeErr	-102	No data of the requested format type in scrap
		Available in OS X v10.0 and later.
scrapFlavorNotFoundErr	-102	No data of the requested format type in scrap (same as $noTypeErr$)
		Available in OS X v10.0 and later.
internalScrapErr	-4988	Scrap Manager has encountered an internal error
		Available in OS X v10.0 and later.
duplicateScrapFlavorErr	-4989	Data (or a promise for data) of the specified format already exists in the scrap
		Available in OS X v10.0 and later.
badScrapRefErr	-4990	Invalid scrap reference
		Available in OS X v10.0 and later.
processStateIncorrectErr	-4991	Available in OS X v10.0 and later.
scrapPromiseNotKeptErr	-4992	No data supplied for the promised flavor
		Available in OS X v10.0 and later.
noScrapPromiseKeeperErr	-4993	No scrap promise–keeper function set for the scrap
		Available in OS X v10.0 and later.
nilScrapFlavorDataErr	-4994	Available in OS X v10.0 and later.
scrapFlavorFlagsMismatchErr	-4995	Available in OS X v10.0 and later.
scrapFlavorSizeMismatchErr	-4996	Available in OS X v10.0 and later.
illegalScrapFlavorFlagsErr	-4997	Invalid scrap flavor flags
		Available in OS X v10.0 and later.

Result Code	Value	Description
illegalScrapFlavorTypeErr	-4998	Invalid scrap flavor Available in OS X v10.0 and later.
illegalScrapFlavorSizeErr	-4999	Invalid size for scrap flavor data Available in OS X v10.0 and later.

Gestalt Constants

You can check for version and feature availability information by using the Scrap Manager selectors defined in the Gestalt Manager. For more information see *Gestalt Manager Reference*.

Deprecated Scrap Manager Functions

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

Deprecated in OS X v10.5

CallInScrapPromises

Forces all promised flavors to be supplied. (Deprecated in OS X v10.5. Use PasteboardResolvePromises instead.)

```
OSStatus CallInScrapPromises (
    void
);
```

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

Before quitting, your application should call CallInScrapPromises in order to ensure the user's ability to paste into other applications. Your application should call CallInScrapPromises even if your application does not explicitly promise any flavors.

It doesn't hurt to call CallinScrapPromises more than once, though promise-keeper functions may be asked to keep promises they already tried and failed.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

ClearCurrentScrap

Clears the current scrap. (Deprecated in OS X v10.5. Use PasteboardClear instead.)

```
OSStatus ClearCurrentScrap (
    void
);
```

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

Call ClearCurrentScrap immediately when the user requests a Copy or Cut operation, even if you maintain a private scrap. You should not wait until receiving a suspend event to call ClearCurrentScrap. You don't need to put any data on the scrap immediately, although it's perfectly fine to do so. You do need to call GetCurrentScrap (page 19) after ClearCurrentScrap so you'll have a valid scrap reference to pass to other functions.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Related Sample Code HackTV Carbon

Declared in

Scrap.h

ClearScrap

Clears a given scrap. (Deprecated in OS X v10.5. Use PasteboardClear instead.)

```
OSStatus ClearScrap (
    ScrapRef *inOutScrap
);
```

Parameters

inOutScrap

A pointer to a scrap reference. On input, this parameter should refer to the scrap to clear. On output, ClearScrap returns a reference to the cleared scrap.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

ClearScrap will clear the scrap passed in and return the incremented ScrapRef value. ClearScrap behaves similarly to the GetScrapByName function when called with the kScrapClearNamedScrap option, with the benefit of not requiring a name in the event one is not available.

Availability

Available in OS X v10.1 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

DisposeScrapPromiseKeeperUPP

Disposes of a universal procedure pointer to a function that provides promised scrap data. (Deprecated in OS X v10.5.)

```
void DisposeScrapPromiseKeeperUPP (
    ScrapPromiseKeeperUPP userUPP
);
```

Parameters

userUPP

The UPP to dispose of.

Discussion

See ScrapPromiseKeeperProcPtr (page 6) for more information on promise keeper functions.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Declared in

Scrap.h

GetCurrentScrap

Obtains a reference to the current scrap. (Deprecated in OS X v10.5. Use PasteboardCreate instead.)

```
OSStatus GetCurrentScrap (
    ScrapRef *scrap
);
```

Parameters

scrap

A pointer to a scrap reference. On return, this scrap reference refers to the current scrap.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

Your application can determine if the scrap contents have changed by storing the scrap reference returned by GetCurrentScrap and comparing it against the scrap reference returned by GetCurrentScrap at a later time. If the two scrap references are different, the scrap has changed.

Carbon applications should use GetCurrentScrap instead of checking the convertClipboardFlag in the EventRecord.

The ScrapRef obtained via GetCurrentScrap becomes invalid and unusable after the scrap is cleared. That is, the scrap reference is valid until a Carbon client calls ClearCurrentScrap (page 17), a Classic client calls ZeroScrap, or a Cocoa client calls declareTypes:owner:.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Related Sample Code HackTV Carbon

Declared in

Scrap.h

GetScrapByName

Obtains a reference to a named scrap. (Deprecated in OS X v10.5. Use PasteboardCreate instead.)

```
OSStatus GetScrapByName (
    CFStringRef name,
    OptionBits options,
    ScrapRef *scrap
);
```

Parameters

name

A CFString containing the name of the scrap to obtain. You may specify a standard scrap by passing one of the constants described in "Named Scraps" (page 13) in this parameter.

options

A value indicating whether the specified scrap should be cleared after the reference is returned. See "Options for the GetScrapByName Function" (page 12) for more information.

scrap

A pointer to a scrap reference. On return, this scrap reference refers to the scrap named in the name parameter.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

GetScrapByName allows access to an indefinite number of public or private scraps. The constant kScrapClipboardScrap refers to the "current" scrap. kScrapFindScrap allows Carbon applications to interact seamlessly with Cocoa's global find scrap. Note that calling:

```
GetScrapByName( kScrapClipboardScrap, kScrapGetNamedScrap, &scrap );
```

is an exact match to the call:

```
GetCurrentScrap( &scrap );
```

Additionally, a call to:

```
GetScrapByName( kScrapClipboardScrap, kScrapClearNamedScrap, &scrap );
```

is a replacement for the sequence:

```
ClearCurrentScrap();
```

```
GetCurrentScrap( &scrap );
```

You can use this API to generate your own private scraps to use as a high level interprocess communication between your main and helper applications. Apple recommends using the Java naming convention for your scraps, for example, com.mycompany.scrap.secret.

Availability

Available in OS X v10.1 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

GetScrapFlavorCount

Obtains a scrap flavor count to use with the GetScrapFlavorInfoList function. (Deprecated in OS X v10.5. Use PasteboardCopyItemFlavors instead.)

```
OSStatus GetScrapFlavorCount (
    ScrapRef scrap,
    UInt32 *infoCount
);
```

Parameters

scrap

A reference to the scrap to get the flavor count for.

infoCount

A pointer to a count variable. On return, specifies the flavor count for the specified scrap.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

For related information, see GetScrapFlavorInfoList (page 24).

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

GetScrapFlavorData

Obtains the data for the specified flavor from the specified scrap. (Deprecated in OS X v10.5. Use PasteboardCopyItemFlavorData instead.)

```
OSStatus GetScrapFlavorData (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    Size *byteCount,
    void *destination
);
```

Parameters

scrap

A reference to the scrap to get data from.

flavorType

The flavor type to obtain data for. Some flavor types are described in "Scrap Flavor Types" (page 10).

byteCount

A pointer to a size variable. Before calling GetScrapFlavorData, specify the maximum number of bytes your buffer can contain. On return, GetScrapFlavorData provides the number of bytes of data that were actually available, even if this is more than you requested.

destination

A pointer to a buffer, local variable, or other storage location created and disposed of by your application. The size, in bytes, must be at least as large as the value you pass in the byteCount parameter. On return, this buffer contains the specified flavor data. The amount of data returned will not exceed the value you passed in byteCount, even if the number of bytes of available data is more than you specified in byteCount.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

This function blocks until the specified flavor data is available.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

GetScrapFlavorFlags

Obtains information about a specified scrap flavor. (Deprecated in OS X v10.5. Use PasteboardGetItemFlavorFlags instead.)

```
OSStatus GetScrapFlavorFlags (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    ScrapFlavorFlags *flavorFlags
);
```

Parameters

scrap

A reference to the scrap to check.

flavorType

The flavor type to check for. Some scrap flavor types are described in "Scrap Flavor Types" (page 10).

flavorFlags

A pointer to a variable of type ScrapFlavorFlags; values for this type are described in "Scrap Flavor Flags" (page 11). On return, this variable contains information about the flavor specified by the flavorType parameter.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

The GetScrapFlavorFlags function tells you whether the scrap contains data for a particular flavor and, if it does, provides some information about that flavor. This function never blocks, and is useful for deciding whether to enable the Paste item in your Edit menu, among other things.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

${\bf GetScrapFlavorInfoList}$

Fills an array with items which each describe a corresponding flavor in the scrap. (Deprecated in OS X v10.5. Use PasteboardCopyItemFlavors instead.)

```
OSStatus GetScrapFlavorInfoList (
    ScrapRef scrap,
    UInt32 *infoCount,
    ScrapFlavorInfo info[]
);
```

Parameters

scrap

A reference to the scrap to get the flavor information for.

infoCount

A pointer to a count variable. Before calling GetScrapFlavorInfoList, set the value to the number of flavors to get information for. Your application typically obtains the flavor count by calling GetScrapFlavorCount (page 21).

On return, specifies the number of flavors for which information was supplied, which may be smaller than the number requested.

info

An array of type ScrapFlavorInfo (page 8), whose size is indicated by the infoCount parameter. The array is created and disposed of by your application. On return, the array elements contain the flavor information.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

GetScrapFlavorSize

Obtains the size of the data for a specified flavor from a scrap. (Deprecated in OS X v10.5. Use PasteboardCopyItemFlavorData instead.)

```
OSStatus GetScrapFlavorSize (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    Size *byteCount
);
```

Parameters

scrap

A reference to the scrap to get the flavor data size from.

flavorType

The flavor type to obtain the size for. Some flavor types are described in "Scrap Flavor Types" (page 10).

byteCount

A pointer to a size variable. On return, this variable contains the byte count for the data of the specified flavor.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

This function will block until the size of the data is available. This may mean blocking until the data itself is available, since some scrap senders don't know how big a flavor will be until they've made the flavor data. GetScrapFlavorSize is intended as a prelude to allocating memory and calling GetScrapFlavorData (page 22).

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

InvokeScrapPromiseKeeperUPP

Calls a universal procedure pointer to a function that provides promised scrap data. (Deprecated in OS X v10.5.)

```
OSStatus InvokeScrapPromiseKeeperUPP (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    void *userData,
    ScrapPromiseKeeperUPP userUPP
);
```

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

You should not need to use the function InvokeScrapPromiseKeeperUPP, as the system calls your scrap promise keeper function for you.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Declared in

Scrap.h

LoadScrap

Reads the scrap from the scrap file into memory. (Deprecated in OS X v10.5.)

```
OSStatus LoadScrap (
    void
);
```

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

The function allocates memory in your application's heap to hold the scrap before reading the scrap into memory. The scrap file is located in the System Folder of the startup volume and has the filename as indicated by the scrapName field of the scrap information structure (usually "Clipboard"). If the scrap is already in memory, this function does nothing.

Special Considerations

In Mac OS X, this function does nothing and is no longer necessary.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

NewScrapPromiseKeeperUPP

Creates a new universal procedure pointer to a function that provides promised scrap data. (Deprecated in OS X v10.5.)

```
ScrapPromiseKeeperUPP NewScrapPromiseKeeperUPP (
    ScrapPromiseKeeperProcPtr userRoutine
);
```

Parameters

userRoutine

A pointer to your scrap promise keeper function.

Return Value

A UPP to the scrap promise keeper function. See the description of the ScrapPromiseKeeperUPP data type.

Discussion

See ScrapPromiseKeeperProcPtr (page 6) for more information on promise keeper functions.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Declared in

Scrap.h

PutScrapFlavor

Puts data on or promises data to the specified scrap. (Deprecated in OSXv10.5. Use PasteboardPutItemFlavor instead.)

```
OSStatus PutScrapFlavor (
    ScrapRef scrap,
    ScrapFlavorType flavorType,
    ScrapFlavorFlags flavorFlags,
    Size flavorSize,
    const void *flavorData
);
```

Parameters

scrap

A reference to the scrap to supply data or promises to.

flavorType

The flavor type to supply or promise the data for. Some flavor types are described in "Scrap Flavor Types" (page 10).

flavorFlags

A variable of type ScrapFlavorFlags that you use to supply information about the flavor specified by the flavorType parameter. See "Scrap Flavor Flags" (page 11) for a description of the values you can use in this parameter.

flavorSize

The size of the data you are supplying or promising, in bytes. If you don't know the size, pass kScrapFlavorSizeUnknown to place a promise for data of undetermined size on the scrap. If you pass 0 in this parameter, a flavor with no expected data—not a promise—is placed on the scrap, and the value of the flavorData parameter is ignored.

flavorData

A pointer to a buffer, local variable, or other storage location, created and disposed of by your application. Before calling PutScrapFlavor to put flavor data on the scrap, store the data in this buffer. For information on the number of bytes of data, see the description of the flavorSize parameter.

Pass NULL for this parameter to indicate you will provide data through a subsequent call to PutScrapFlavor, either later in the same code flow or during execution of your ScrapPromiseKeeperProcPtr (page 6) callback.

The last time you can provide scrap flavor data is when your scrap promise-keeper function gets called. It is not possible to call PutScrapFlavor while handling a suspend event; suspend events under Carbon don't work the way they do under Mac OS 8 and 9.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

PutScrapFlavor is different than PutScrap in that it includes a ScrapRef parameter and it supports promising a flavor for later delivery, rather than supplying it immediately.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Related Sample Code HackTV Carbon

Declared in

Scrap.h

SetScrapPromiseKeeper

Associates an application-defined promise-keeper function with a scrap or removes an associated promise-keeper. (Deprecated in OS X v10.5. Use PasteboardSetPromiseKeeper instead.)

```
OSStatus SetScrapPromiseKeeper (
    ScrapRef scrap,
    ScrapPromiseKeeperUPP upp,
    const void *userData
);
```

Parameters

scrap

A reference to the scrap to set the promise-keeper function for.

upp

A universal procedure pointer to a scrap promise-keeper function. For more information, see ScrapPromiseKeeperProcPtr (page 6)

You can remove a promise-keeper function from a scrap by passing NULL for this parameter.

userData

An untyped pointer to a buffer, local variable, or other storage location, created and disposed of by your application. This value is passed to the promise-keeper function specified by the upp parameter, which can do whatever it needs to do with the value. For example, you might pass a pointer or handle to some private scrap data that your promise-keeper function uses in fabricating one or more promised flavors.

If your promise-keeper function has no need for special user data, pass NULL for this parameter.

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Declared in

Scrap.h

UnloadScrap

Writes the scrap from memory to the scrap file. (Deprecated in OS X v10.5.)

```
OSStatus UnloadScrap (
    void
);
```

Return Value

A result code. See "Scrap Manager Result Codes" (page 14).

Discussion

This function releases the memory occupied by the scrap in your application's heap. The scrap file is located in the System Folder of the startup volume and has the filename as indicated by the scrapName field of the scrap information structure (usually "Clipboard"). If the scrap is already on the disk, this function does nothing.

Special Considerations

In Mac OS X, this function does nothing and is no longer necessary.

Availability

Available in OS X v10.0 and later.

Deprecated in OS X v10.5.

Not available to 64-bit applications.

Related Sample Code TE Over Background

Declared in

Scrap.h

Document Revision History

This table describes the changes to Scrap Manager Reference.

Date	Notes
2007-12-11	Added deprecation information.
2003-01-02	${\bf AddeddocumentationforClearScrapandGetScrapByNamefunctions.}$
	Fixed description of PutScrapFlavor behavior.
	Revised existing Scrap Manager result codes and added new ones.
	Fixed typographical errors.

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