
CGDataProvider Reference

[Graphics & Imaging](#) > Quartz



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CGDataProvider Reference

Derived From:	<i>CType Reference</i>
Framework:	ApplicationServices/ApplicationServices.h
Declared in	CGDataProvider.h

Overview

The CGDataProvider header file declares a data type that supplies Quartz functions with data. Data provider objects abstract the data-access task and eliminate the need for applications to manage data through a raw memory buffer.

For information on how to use CGDataProvider functions, see *Quartz 2D Programming Guide Programming Guide*.

See also *CGDataConsumer Reference*.

Functions

CGDataProviderCopyData

Returns a copy of the provider's data.

```
CFDataRef CGDataProviderCopyData(  
    CGDataProviderRef provider  
);
```

Parameters

provider

The data provider whose data you want to copy.

Return Value

A new data object containing a copy of the provider's data. You are responsible for releasing this object.

Availability

Available in Mac OS X v10.5 and later.

Declared In

CGDataProvider.h

CGDataProviderCreateDirect

Creates a Quartz direct-access data provider.

```
CGDataProviderRef CGDataProviderCreateDirect (
    void *info,
    off_t size,
    const CGDataProviderDirectCallbacks *callbacks
);
```

Parameters

info

A pointer to data of any type or NULL. When Quartz calls the functions specified in the `callbacks` parameter, it sends each of the functions this pointer.

size

The number of bytes of data to provide.

callbacks

A pointer to a `CGDataProviderDirectCallbacks` structure that specifies the callback functions you implement to handle the data provider's basic memory management.

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a direct-access data provider that uses callback functions to read data from your program in a single block.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`CGDataProvider.h`

CGDataProviderCreateSequential

Creates a Quartz sequential-access data provider.

```
CGDataProviderRef CGDataProviderCreateSequential (
    void *info,
    const CGDataProviderSequentialCallbacks *callbacks
);
```

Parameters

info

A pointer to data of any type or NULL. When Quartz calls the functions specified in the `callbacks` parameter, it sends each of the functions this pointer.

callbacks

A pointer to a `CGDataProviderSequentialCallbacks` structure that specifies the callback functions you implement to handle the data provider's basic memory management.

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a sequential-access data provider that uses callback functions to read data from your program in a single block.

Availability

Available in Mac OS X v10.5 and later.

Declared In

CGDataProvider.h

CGDataProviderCreateWithCFData

Creates a Quartz data provider that reads from a CFData object.

```
CGDataProviderRef CGDataProviderCreateWithCFData (
    CFDataRef data
);
```

Parameters

data

The CFData object to read from.

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You can use this function when you need to represent Quartz data as a CFData type. For example, you might create a CFData object when reading data from the pasteboard.

Availability

Available in Mac OS X v10.4 and later.

Declared In

CGDataProvider.h

CGDataProviderCreateWithData

Creates a Quartz direct-access data provider that uses data your program supplies.

```
CGDataProviderRef CGDataProviderCreateWithData (
    void *info,
    const void *data,
    size_t size,
    CGDataProviderReleaseDataCallback releaseData
);
```

Parameters

info

A pointer to data of any type, or NULL. When Quartz calls the function specified in the `releaseData` parameter, Quartz sends it this pointer as its first argument.

data

A pointer to the array of data that the provider contains.

size

A value that specifies the number of bytes that the data provider contains.

releaseData

A pointer to a release callback for the data provider, or `NULL`. Your release function is called when Quartz frees the data provider. For more information, see [CGDataProviderReleaseDataCallback](#) (page 15).

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a direct-access data provider that uses callback functions to read data from your program an entire block at one time.

Availability

Available in Mac OS X v10.0 and later.

Related Sample Code

CarbonSketch

Declared In

CGDataProvider.h

CGDataProviderCreateWithFilename

Creates a Quartz direct-access data provider that uses a file to supply data.

```
CGDataProviderRef CGDataProviderCreateWithFilename(
    const char *filename
);
```

Parameters

filename

The full or relative pathname to use for the data provider. When you supply Quartz data via the provider, it reads the data from the specified file.

Return Value

A new data provider or `NULL` if the file could not be opened. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a direct-access data provider that supplies data from a file. When you supply Quartz with a direct-access data provider, Quartz obtains data from your program in a single block.

Availability

Available in Mac OS X v10.0 and later.

Declared In

CGDataProvider.h

CGDataProviderCreateWithURL

Creates a Quartz direct-access data provider that uses a URL to supply data.


```
CGDataProviderRef CGDataProviderCreateWithURL (
    CFURLRef url
);
```

Parameters*url*

A CFURL object to use for the data provider. When you supply Quartz data via the provider, it reads the data from the URL address.

Return Value

A new data provider or NULL if the data from the URL could not be accessed. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a direct-access data provider that supplies data from a URL. When you supply Quartz with a direct-access data provider, Quartz obtains data from your program in a single entire block.

Availability

Available in Mac OS X v10.0 and later.

Declared In

CGDataProvider.h

CGDataProviderGetTypeID

Returns the Core Foundation type identifier for Quartz data providers.

```
CFTypeID CGDataProviderGetTypeID (
    void
);
```

Return Value

The identifier for the opaque type [CGDataProviderRef](#) (page 18).

Availability

Available in Mac OS X v10.2 and later.

Declared In

CGDataProvider.h

CGDataProviderRelease

Decrements the retain count of a data provider.

```
void CGDataProviderRelease (
    CGDataProviderRef provider
);
```

Parameters*provider*

The data provider to release.

Discussion

This function is equivalent to `CFRelease`, except that it does not cause an error if the `provider` parameter is NULL.

Availability

Available in Mac OS X v10.0 and later.

Declared In

CGDataProvider.h

CGDataProviderRetain

Increments the retain count of a data provider.

```
CGDataProviderRef CGDataProviderRetain (
    CGDataProviderRef provider
);
```

Parameters

provider

The data provider to retain.

Return Value

The same data provider you passed in as the *provider* parameter.

Discussion

This function is equivalent to `CFRetain`, except that it does not cause an error if the *provider* parameter is `NULL`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

CGDataProvider.h

Callbacks by Task

Sequential-Access Data Provider Callbacks

[CGDataProviderGetBytesCallback](#) (page 13)

A callback function that copies from a provider data stream into a Quartz-supplied buffer.

[CGDataProviderReleaseInfoCallback](#) (page 16)

A callback function that releases any private data or resources associated with the data provider.

[CGDataProviderRewindCallback](#) (page 16)

A callback function that moves the current position in the data stream back to the beginning.

[CGDataProviderSkipBytesCallback](#) (page 17)

A callback function that advances the current position in the data stream supplied by the provider.

[CGDataProviderSkipForwardCallback](#) (page 18)

A callback function that advances the current position in the data stream supplied by the provider.

Direct-Access Data Provider Callbacks

[CGDataProviderGetBytePointerCallback](#) (page 11)

A callback function that returns a generic pointer to the provider data.

[CGDataProviderGetBytesAtOffsetCallback](#) (page 12)

A callback function that copies data from the provider into a Quartz buffer.

[CGDataProviderReleaseBytePointerCallback](#) (page 14)

A callback function that releases the pointer Quartz obtained by calling [CGDataProviderGetBytePointerCallback](#) (page 11).

[CGDataProviderReleaseDataCallback](#) (page 15)

A callback function that releases data you supply to the function [CGDataProviderCreateWithData](#) (page 7).

[CGDataProviderGetBytesAtPositionCallback](#) (page 13)

A callback function that copies data from the provider into a Quartz buffer.

Callbacks

CGDataProviderGetBytePointerCallback

A callback function that returns a generic pointer to the provider data.

```
const void * (*CGDataProviderGetBytePointerCallback) (
    void *info
);
```

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

```
void *MyProviderGetBytePointer (
    void *info
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreateDirectAccess](#) (page 23).

Return Value

A generic pointer to your provider data. By supplying this pointer, you are giving Quartz read-only access to both the pointer and the underlying provider data. You must not move or modify the provider data until Quartz calls your [CGDataProviderReleaseBytePointerCallback](#) (page 14) function.

Discussion

When Quartz needs direct access to your provider data, this function is called.

For information on how to associate your function with a direct-access data provider, see [CGDataProviderCreateDirectAccess](#) (page 23) and [CGDataProviderDirectAccessCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderGetBytesAtOffsetCallback

A callback function that copies data from the provider into a Quartz buffer.

```
typedef size_t (*CGDataProviderGetBytesAtOffsetCallback) (
    void *info,
    void *buffer,
    size_t offset,
    size_t count
);
```

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

```
size_t MyProviderGetBytesWithOffset (
    void *info,
    void *buffer,
    size_t offset,
    size_t count
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreateDirectAccess](#) (page 23).

buffer

The Quartz-supplied buffer into which you copy the specified number of bytes.

offset

Specifies the relative location in the data provider at which to begin copying data.

count

The number of bytes to copy.

Return Value

The number of bytes copied. If no more data can be written to the buffer, you should return 0.

Discussion

When Quartz is ready to receive data from the provider, your function is called.

For information on how to associate your function with a direct-access data provider, see [CGDataProviderCreateDirectAccess](#) (page 23) and [CGDataProviderDirectAccessCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderGetBytesAtPositionCallback

A callback function that copies data from the provider into a Quartz buffer.

```
typedef size_t (*CGDataProviderGetBytesAtPositionCallback) (
    void *info,
    void *buffer,
    off_t position,
    size_t count
);
```

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

```
size_t MyProviderGetBytesAtPosition (
    void *info,
    void *buffer,
    off_t position,
    size_t count
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreateDirect](#) (page 6).

buffer

The Quartz-supplied buffer into which you copy the specified number of bytes.

position

Specifies the relative location in the data provider at which to begin copying data.

count

The number of bytes to copy.

Return Value

The number of bytes copied. If no more data can be written to the buffer, you should return 0.

Discussion

When Quartz is ready to receive data from the provider, your function is called.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`CGDataProvider.h`

CGDataProviderGetBytesCallback

A callback function that copies from a provider data stream into a Quartz-supplied buffer.

```
size_t (*CGDataProviderGetBytesCallback) (
    void *info,
    void *buffer,
    size_t count
);
```

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

```
size_t MyProviderGetBytes (
    void *info,
    void *buffer,
    size_t count
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreate](#) (page 23).

buffer

The Quartz-supplied buffer into which you copy the specified number of bytes.

count

The number of bytes to copy.

Return Value

The number of bytes copied. If no more data can be written to the buffer, you should return 0.

Discussion

When Quartz is ready to receive data from the provider data stream, your function is called. It should copy the specified number of bytes into `buffer`.

For information on how to associate your callback function with a data provider, see [CGDataProviderCreate](#) (page 23) and [CGDataProviderCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

`CGDataProvider.h`

CGDataProviderReleaseBytePointerCallback

A callback function that releases the pointer Quartz obtained by calling [CGDataProviderGetBytePointerCallback](#) (page 11).

```
typedef void (*CGDataProviderReleaseBytePointerCallback) (
    void *info,
    const void *pointer
);
```

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

```
void MyProviderReleaseBytePointer (
    void *info,
    const void *pointer
);
```

Parameters*info*

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreateDirectAccess](#) (page 23).

pointer

A pointer to your provider data. This is the same pointer you returned in [CGDataProviderGetBytePointerCallback](#) (page 11).

Discussion

When Quartz no longer needs direct access to your provider data, your function is called. You may safely modify, move, or release your provider data at this time.

For information on how to associate your function with a direct-access data provider, see [CGDataProviderCreateDirectAccess](#) (page 23) and [CGDataProviderDirectAccessCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderReleaseDataCallback

A callback function that releases data you supply to the function [CGDataProviderCreateWithData](#) (page 7).

```
typedef void (*CGDataProviderReleaseDataCallback) (
    void *info,
    const void *data
    size_t size
);
```

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

```
void MyProviderReleaseData (
    void *info,
    const void *data
    size_t size
);
```

Parameters*info*

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreateWithData](#) (page 7).

data

A pointer to your provider data.

size

The size of the data.

Discussion

When Quartz no longer needs direct access to your provider data, your function is called. You may safely modify, move, or release your provider data at this time.

Availability

Available in Mac OS X v10.5 and later.

Declared In

CGDataProvider.h

CGDataProviderReleaseInfoCallback

A callback function that releases any private data or resources associated with the data provider.

```
void (*CGDataProviderReleaseInfoCallback) (
    void *info
);
```

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

```
void MyProviderReleaseInfo (
    void *info
);
```

Parameters

info

A generic pointer to private information shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreate](#) (page 23).

Discussion

When Quartz frees a data provider that has an associated release function, the release function is called.

For information on how to associate your callback function with a data provider, see [CGDataProviderCreate](#) (page 23) and [CGDataProviderCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderRewindCallback

A callback function that moves the current position in the data stream back to the beginning.

```
void (*CGDataProviderRewindCallback) (
    void *info
);
```

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

```
void MyProviderRewind (
```



```
void *info
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreate](#) (page 23).

Discussion

When Quartz needs to read from the beginning of the provider's data stream, your function is called.

For information on how to associate your callback function with a data provider, see [CGDataProviderCreate](#) (page 23) and [CGDataProviderCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderSkipBytesCallback

A callback function that advances the current position in the data stream supplied by the provider.

```
void (*CGDataProviderSkipBytesCallback) (
    void *info,
    size_t count
);
```

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

```
void MyProviderSkipBytes (
    void *info,
    size_t count
);
```

Parameters

info

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreate](#) (page 23).

count

The number of bytes to skip.

Discussion

When Quartz needs to advance forward in the provider's data stream, your function is called.

For information on how to associate your callback function with a data provider, see [CGDataProviderCreate](#) (page 23) and [CGDataProviderCallbacks](#) (page 19).

Availability

Available in Mac OS X v10.3 and later.

Declared In

CGDataProvider.h

CGDataProviderSkipForwardCallback

A callback function that advances the current position in the data stream supplied by the provider.

```
off_t (*CGDataProviderSkipForwardCallback) (
    void *info,
    off_t count
);
```

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

```
off_t MyProviderSkipForwardBytes (
    void *info,
    off_t count
);
```

Parameters*info*

A generic pointer to private data shared among your callback functions. This is the same pointer you supplied to [CGDataProviderCreate](#) (page 23).

count

The number of bytes to skip.

Return Value

The number of bytes that were actually skipped.

Discussion

When Quartz needs to advance forward in the provider's data stream, your function is called.

Availability

Available in Mac OS X v10.5 and later.

Declared In

CGDataProvider.h

Data Types

CGDataProviderRef

Defines an opaque type that supplies Quartz with data.

```
typedef struct CGDataProvider *CGDataProviderRef;
```

Discussion

Some Quartz routines supply blocks of data to your program. Rather than reading through a raw memory buffer, data provider objects of type `CGDataProviderRef` allow you to supply Quartz functions with data.

In Mac OS X version 10.2 and later, `CGDataProviderRef` is derived from `CTypeRef` and inherits the properties that all Core Foundation types have in common. For more information, see *CType Reference*.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`CGDataProvider.h`

CGDataProviderCallbacks

Defines a structure containing pointers to client-defined callback functions that manage the sending of data for a sequential-access data provider.

```
struct CGDataProviderCallbacks {
    CGDataProviderGetBytesCallback getBytes;
    CGDataProviderSkipBytesCallback skipBytes;
    CGDataProviderRewindCallback rewind;
    CGDataProviderReleaseInfoCallback releaseProvider;
};
typedef struct CGDataProviderCallbacks CGDataProviderCallbacks;
```

Fields

`getBytes`

A pointer to a function that copies data from the provider. For more information, see [CGDataProviderGetBytesCallback](#) (page 13).

`skipBytes`

A pointer to a function that Quartz calls to advance the stream of data supplied by the provider. For more information, see [CGDataProviderSkipBytesCallback](#) (page 17).

`rewind`

A pointer to a function Quartz calls to return the provider to the beginning of the data stream. For more information, see [CGDataProviderRewindCallback](#) (page 16).

`releaseProvider`

A pointer to a function that handles clean-up for the data provider, or `NULL`. For more information, see [CGDataProviderReleaseInfoCallback](#) (page 16).

Discussion

The functions specified by the `CGDataProviderCallbacks` structure are responsible for sequentially copying data to a memory buffer for Quartz to use. The functions are also responsible for handling the data provider's basic memory management. You supply a `CGDataProviderCallbacks` structure to the function [CGDataProviderCreate](#) (page 23) to create a sequential-access data provider.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`CGDataProvider.h`

CGDataProviderDirectAccessCallbacks

Defines pointers to client-defined callback functions that manage the sending of data for a direct-access data provider.

```

struct CGDataProviderDirectAccessCallbacks {
    CGDataProviderGetBytePointerCallback getBytePointer;
    CGDataProviderReleaseBytePointerCallback releaseBytePointer;
    CGDataProviderGetBytesAtOffsetCallback getBytes;
    CGDataProviderReleaseInfoCallback releaseProvider;
};
typedef struct CGDataProviderDirectAccessCallbacks
CGDataProviderDirectAccessCallbacks;

```

Fields

getBytePointer

A pointer to a function that returns a pointer to the provider's data. For more information, see [CGDataProviderGetBytePointerCallback](#) (page 11).

releaseBytePointer

A pointer to a function that Quartz calls to release a pointer to the provider's data. For more information, see [CGDataProviderReleaseBytePointerCallback](#) (page 14).

getBytes

A pointer to a function that copies data from the provider. For more information, see [CGDataProviderGetBytesAtOffsetCallback](#) (page 12).

releaseProvider

A pointer to a function that handles clean-up for the data provider, or NULL. For more information, see [CGDataProviderReleaseInfoCallback](#) (page 16).

Discussion

You supply a `CGDataProviderDirectAccessCallbacks` structure to the function [CGDataProviderCreateDirectAccess](#) (page 23) to create a data provider for direct access. The functions specified by the `CGDataProviderDirectAccessCallbacks` structure are responsible for copying data a block at a time to a memory buffer for Quartz to use. The functions are also responsible for handling the data provider's basic memory management. For the callback to work, one of the `getBytePointer` and `getBytes` parameters must be non-NULL. If both are non-NULL, then `getBytePointer` is used to access the data.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`CGDataProvider.h`

CGDataProviderDirectCallbacks

Defines pointers to client-defined callback functions that manage the sending of data for a direct-access data provider.

```

struct CGDataProviderDirectCallbacks {
    unsigned int version;
    CGDataProviderGetBytePointerCallback getBytePointer;
    CGDataProviderReleaseBytePointerCallback releaseBytePointer;
    CGDataProviderGetBytesAtPositionCallback getBytesAtPosition;
    CGDataProviderReleaseInfoCallback releaseInfo;
};
typedef struct CGDataProviderDirectCallbacks CGDataProviderDirectCallbacks;

```

Fields

version

The version of this structure. It should be set to 0.

`getBytesPointer`

A pointer to a function that returns a pointer to the provider's data. For more information, see [CGDataProviderGetBytesPointerCallback](#) (page 11).

`releaseBytesPointer`

A pointer to a function that Quartz calls to release a pointer to the provider's data. For more information, see [CGDataProviderReleaseBytesPointerCallback](#) (page 14).

`getBytesAtPosition`

A pointer to a function that copies data from the provider.

`releaseInfo`

A pointer to a function that handles clean-up for the data provider, or NULL. For more information, see [CGDataProviderReleaseInfoCallback](#) (page 16).

Discussion

You supply a `CGDataProviderDirectCallbacks` structure to the function [CGDataProviderCreateDirect](#) (page 6) to create a data provider for direct access. The functions specified by the `CGDataProviderDirectCallbacks` structure are responsible for copying data a block at a time to a memory buffer for Quartz to use. The functions are also responsible for handling the data provider's basic memory management. For the callback to work, one of the `getBytesPointer` and `getBytesAtPosition` parameters must be non-NULL. If both are non-NULL, then `getBytesPointer` is used to access the data.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`CGDataProvider.h`

CGDataProviderSequentialCallbacks

Defines a structure containing pointers to client-defined callback functions that manage the sending of data for a sequential-access data provider.

```
struct CGDataProviderSequentialCallbacks {
    unsigned int version;
    CGDataProviderGetBytesCallback getBytes;
    CGDataProviderSkipForwardCallback skipForward;
    CGDataProviderRewindCallback rewind;
    CGDataProviderReleaseInfoCallback releaseInfo;
};
typedef struct CGDataProviderSequentialCallbacks CGDataProviderSequentialCallbacks;
```

Fields

`version`

The version of this structure. It should be set to 0.

`getBytes`

A pointer to a function that copies data from the provider. For more information, see [CGDataProviderGetBytesCallback](#) (page 13).

`skipForward`

A pointer to a function that Quartz calls to advance the stream of data supplied by the provider.

`rewind`

A pointer to a function Quartz calls to return the provider to the beginning of the data stream. For more information, see [CGDataProviderRewindCallback](#) (page 16).

`releaseInfo`

A pointer to a function that handles clean-up for the data provider, or `NULL`. For more information, see [CGDataProviderReleaseInfoCallback](#) (page 16).

Discussion

The functions specified by the `CGDataProviderSequentialCallbacks` structure are responsible for sequentially copying data to a memory buffer for Quartz to use. The functions are also responsible for handling the data provider's basic memory management. You supply a `CGDataProviderCallbacks` structure to the function [CGDataProviderCreateSequential](#) (page 6) to create a sequential-access data provider.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`CGDataProvider.h`

Deprecated CGDataProvider Functions

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

Deprecated in Mac OS X v10.5

CGDataProviderCreate

Creates a Quartz sequential-access data provider. (Deprecated in Mac OS X v10.5.)

```
CGDataProviderRef CGDataProviderCreate (
    void *info,
    const CGDataProviderCallbacks *callbacks
);
```

Parameters

info

A pointer to data of any type or NULL. When Quartz calls the functions specified in the `callbacks` parameter, it sends each of the functions this data.

callbacks

A pointer to a `CGDataProviderCallbacks` structure that specifies the callback functions you implement to handle the data provider's basic memory management. For a complete description, see [CGDataProviderCallbacks](#) (page 19).

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a sequential-access data provider that uses callback functions to read data from your program in a stream.

Availability

Available in Mac OS X v10.0 and later.

Deprecated in Mac OS X v10.5.

Declared In

`CGDataProvider.h`

CGDataProviderCreateDirectAccess

Creates a Quartz direct-access data provider. (Deprecated in Mac OS X v10.5.)

Deprecated CGDataProvider Functions

```
CGDataProviderRef CGDataProviderCreateDirectAccess (  
    void *info,  
    size_t size,  
    const CGDataProviderDirectAccessCallbacks *callbacks  
);
```

Parameters

info

A pointer to data of any type or NULL. When Quartz calls the functions specified in the `callbacks` parameter, it sends each of the functions this pointer.

size

A value that specifies the number of bytes that the data provider contains.

callbacks

A pointer to a `CGDataProviderDirectAccessCallbacks` structure that specifies the callback functions you implement to handle the data provider's basic memory management. For a complete description, see [CGDataProviderDirectAccessCallbacks](#) (page 19).

Return Value

A new data provider. You are responsible for releasing this object using [CGDataProviderRelease](#) (page 9).

Discussion

You use this function to create a direct-access data provider that uses callback functions to read data from your program in a single block.

Availability

Available in Mac OS X v10.0 and later.

Deprecated in Mac OS X v10.5.

Declared In

`CGDataProvider.h`

Document Revision History

This table describes the changes to *CGDataProvider Reference*.

Date	Notes
2009-01-06	Added entries for the <code>CGDataProviderCopyData</code> and <code>CGDataProviderCreateWithFilename</code> functions.
2008-04-08	Added the version field to two callback data structures.
2007-10-31	Corrected typographical errors.
2007-06-26	Updated for Mac OS X v10.5.
	Added the function <code>CGDataProviderCreateSequential</code> (page 6) and <code>CGDataProviderCreateDirect</code> (page 6).
	Added the callbacks <code>CGDataProviderSkipForwardCallback</code> (page 18) and <code>CGDataProviderGetBytesAtPositionCallback</code> (page 13).
	Added the data structures <code>CGDataProviderDirectCallbacks</code> (page 20) and <code>CGDataProviderSequentialCallbacks</code> (page 21).
2005-04-29	Updated for Mac OS X v10.4.
	Changed the name of the <code>releaseInfo</code> field to <code>releaseProvider</code> and then modified the fields in the data structures <code>CGDataProviderCallbacks</code> (page 19) and <code>CGDataProviderDirectAccessCallbacks</code> (page 19) to match the field descriptions. Formerly, they showed a callback prototype in the field instead of the callback data type. The usage of these data structures remains the same.
	Added the function <code>CGDataProviderCreateWithCFData</code> (page 7).
	Added the callback <code>CGDataProviderReleaseDataCallback</code> (page 15).
2004-08-31	Added introductory material.
2004-02-26	First version of this document. An earlier version of this information appeared in <i>Quartz 2D Reference</i> .

REVISION HISTORY

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