
CGPDFContentStream Reference

Graphics & Animation: 2D Drawing



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

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CGPDFContentStream Reference

Derived From:	None
Framework:	ApplicationServices/ApplicationServices.h
Companion guide	Quartz 2D Programming Guide
Declared in	CGPDFContentStream.h

Overview

The `CGPDFContentStreamRef` opaque type provides access to the data that describes the appearance of a PDF page. A `CGPDFContentStream` object represents one or more PDF content streams for a page and their associated resource dictionaries. A PDF content stream is a sequential set of instructions that specifies how to paint items on a PDF page. A resource dictionary contains information needed by the content stream in order to decode the sequential instructions of the content stream.

`CGPDFContentStream` functions can retrieve both the content streams and the resource dictionaries associated with a PDF page.

This opaque type is not derived from `CType` and therefore there are no functions for retaining and releasing it.

Functions by Task

Creating a PDF Content Stream Object

[CGPDFContentStreamCreateWithPage](#) (page 6)

Creates a content stream object from a PDF page object.

[CGPDFContentStreamCreateWithStream](#) (page 6)

Creates a PDF content stream object from an existing PDF content stream object.

Getting Data from a PDF Content Stream Object

[CGPDFContentStreamGetStreams](#) (page 7)

Gets the array of PDF content streams contained in a PDF content stream object.

[CGPDFContentStreamGetResource](#) (page 7)

Gets the specified resource from a PDF content stream object.

Retaining and Releasing a PDF Content Stream Object

[CGPDFContentStreamRetain](#) (page 8)

Increments the retain count of a PDF content stream object.

[CGPDFContentStreamRelease](#) (page 8)

Decrements the retain count of a PDF content stream object.

Functions

CGPDFContentStreamCreateWithPage

Creates a content stream object from a PDF page object.

```
CGPDFContentStreamRef CGPDFContentStreamCreateWithPage (
    CGPDFPageRef page
);
```

Parameters

page

A PDF page object.

Return Value

A new `CGPDFContentStream` object. You are responsible for releasing this object by calling the function `CGPDFContentStreamRelease`.

Discussion

A `CGPDFContentStream` object can contain more than one PDF content stream. To retrieve an array of the PDF content streams in the object, call the function [CGPDFContentStreamGetStreams](#) (page 7). To obtain the resources associated with a `CGPDFContentStream` object, call the function [CGPDFContentStreamGetResource](#) (page 7).

Availability

Available in Mac OS X version 10.4 and later.

Declared In

`CGPDFContentStream.h`

CGPDFContentStreamCreateWithStream

Creates a PDF content stream object from an existing PDF content stream object.

```
CGPDFContentStreamRef CGPDFContentStreamCreateWithStream (
    CGPDFStreamRef stream,
    CGPDFDictionaryRef streamResources,
    CGPDFContentStreamRef parent
);
```

Parameters

stream

The PDF stream you want to create a content stream from.

streamResources

A PDF dictionary that contains the resources associated with the stream you want to retrieve.

parent

The content stream of the page on which *stream* appears. Supply the *parent* parameter when you create a content stream that's used within a page.

Return Value

A CGPDFContentStream object created from the *stream* parameter. You are responsible for releasing this object by calling the function [CGPDFContentStreamRelease](#) (page 8).

Discussion

You can use this function to get access to the contents of a form, pattern, Type3 font, or any PDF stream.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFContentStream.h

CGPDFContentStreamGetResource

Gets the specified resource from a PDF content stream object.

```
CGPDFObjectRef CGPDFContentStreamGetResource (
    CGPDFContentStreamRef cs,
    const char *category,
    const char *name
);
```

Parameters

cs

A CGPDFContentStream object.

category

A string that specifies the category of the resource you want to obtain.

name

A string that specifies the name of the resource you want to obtain.

Return Value

The resource dictionary.

Discussion

You can use this function to obtain resources used by the content stream, such as forms, patterns, color spaces, and fonts.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFContentStream.h

CGPDFContentStreamGetStreams

Gets the array of PDF content streams contained in a PDF content stream object.

```
CFArrayRef CGPDFContentStreamGetStreams (  
    CGPDFContentStreamRef cs  
);
```

Parameters

cs
A CGPDFContentStream object.

Return Value

The array of PDF content streams that make up the content stream object represented by the *cs* parameter.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFContentStream.h

CGPDFContentStreamRelease

Decrements the retain count of a PDF content stream object.

```
void CGPDFContentStreamRelease (  
    CGPDFContentStreamRef cs  
);
```

Parameters

cs
A PDF content stream.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFContentStream.h

CGPDFContentStreamRetain

Increments the retain count of a PDF content stream object.

```
CGPDFContentStreamRef CGPDFContentStreamRetain (  
    CGPDFContentStreamRef cs  
);
```

Parameters

cs
A PDF content stream.

Return Value

The same PDF content stream you passed in as the *cs* parameter.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFContentStream.h

Data Types

CGPDFContentStreamRef

An opaque type that provides access to the data that describes the appearance of a PDF page.

```
typedef struct CGPDFContentStream *CGPDFContentStreamRef;
```

Availability

Available in Mac OS X v10.4 and later.

Declared In

CGPDFContentStream.h

Document Revision History

This table describes the changes to *CGPDFContentStream Reference*.

Date	Notes
2008-10-15	Added a note about not retaining and releasing this object.
2006-12-22	Made minor editorial changes.
2006-04-04	Updated introduction.
2005-04-29	First version.

REVISION HISTORY

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