# CGPDFOperatorTable Reference

Graphics & Imaging > Quartz



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# Contents

#### CGPDFOperatorTable Reference 5

Overview 5 Functions by Task 5 Creating a PDF Operator Table 5 Setting Callback Functions 5 Retaining and Releasing a PDF Operator Table 5 Functions 6 CGPDFOperatorTableCreate 6 CGPDFOperatorTableRelease 6 CGPDFOperatorTableRetain 6 CGPDFOperatorTableSetCallback 7 Callbacks 7 CGPDFOperatorCallback 7 Data Types 8 CGPDFOperatorTableRef 8

#### Document Revision History 9

Index 11

CONTENTS

# CGPDFOperatorTable Reference

Derived From: Framework: Declared in None ApplicationServices/ApplicationServices.h CGPDFOperatorTable.h

## Overview

A CGPDFOperatorTable object stores callback functions for PDF operators. You pass an operator table and a PDF content stream to a CGPDFScanner object. When the scanner parses a PDF operator, Quartz invokes your callback for that operator. See also CGPDFScanner Reference and CGPDFContentStream Reference.

**Note:** This opaque type is not derived from CFType and therefore you can't use the Core Foundation base functions on it, such as CFRetain and CFRelease. Memory management is handled by the specific functions CGPDFOperatorTableRetain (page 6) and CGPDFOperatorTableRelease (page 6).

For more about PDF operators, see the latest version of PDF Reference, Adobe Systems Incorporated.

# Functions by Task

### **Creating a PDF Operator Table**

CGPDFOperatorTableCreate (page 6) Creates an empty PDF operator table.

### **Setting Callback Functions**

CGPDFOperatorTableSetCallback (page 7) Sets a callback function for a PDF operator.

### **Retaining and Releasing a PDF Operator Table**

CGPDFOperatorTableRetain (page 6) Increments the retain count of a CGPDFOperatorTable object. CGPDFOperatorTableRelease (page 6)

Decrements the retain count of a CGPDFOperatorTable object.

# **Functions**

#### CGPDFOperatorTableCreate

Creates an empty PDF operator table.

```
CGPDFOperatorTableRef CGPDFOperatorTableCreate (
    void
);
```

#### **Return Value**

An empty PDF operator table. You are responsible for releasing this object by calling CGPDFOperatorTableRelease (page 6).

#### Discussion

Call the function CGPDFOperatorTableSetCallback (page 7) to fill the operator table with callbacks.

#### Availability

Available in Mac OS X version 10.4 and later.

#### Declared In

CGPDFOperatorTable.h

#### CGPDFOperatorTableRelease

Decrements the retain count of a CGPDFOperatorTable object.

```
void CGPDFOperatorTableRelease (
    CGPDFOperatorTableRef table
):
```

## Parameters

table

A PDF operator table.

**Availability** Available in Mac OS X version 10.4 and later.

**Declared In** CGPDFOperatorTable.h

#### CGPDFOperatorTableRetain

Increments the retain count of a CGPDFOperatorTable object.

```
CGPDFOperatorTableRef CGPDFOperatorTableRetain (
   CGPDFOperatorTableRef table
);
```

#### **Parameters**

table

A PDF operator table.

#### **Return Value**

The same PDF operator table you passed in as the table parameter.

#### Availability

Available in Mac OS X version 10.4 and later.

#### Declared In

CGPDFOperatorTable.h

#### CGPDFOperatorTableSetCallback

Sets a callback function for a PDF operator.

```
void CGPDFOperatorTableSetCallback (
  CGPDFOperatorTableRef table,
  const char *name,
   CGPDFOperatorCallback callback
);
```

#### **Parameters**

table

A PDF operator table.

name

The name of the PDF operator you want to set a callback for.

#### callback

The callback to invoke for the PDF operator specified by the name parameter.

#### Discussion

You call the function CGPDFOperatorTableSetCallback for each PDF operator for which you want to provide a callback. See Appendix A in the PDF Reference, Second Edition, version 1.3, Adobe Systems Incorporated for a summary of PDF operators.

#### **Availability**

Available in Mac OS X version 10.4 and later.

#### **Declared In**

CGPDFOperatorTable.h

## Callbacks

#### CGPDFOperatorCallback

Performs custom processing for PDF operators.

```
typedef void (*CGPDFOperatorCallback)(
    CGPDFScannerRef scanner,
    void *info
);
```

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

```
void MyCGPDFOperatorCallback (
    CGPDFScannerRef scanner,
    void *info
);
```

#### Parameters

scanner

A CGPDFScanner object. Quartz passes the scanner to your callback function. The scanner contains the PDF content stream that has the PDF operator that corresponds to this callback.

info

A pointer to data passed to the callback.

#### Discussion

Your callback function takes any action that's appropriate for your application. For example, if you want to count the number of inline images in a PDF but ignore the image data, you would set a callback for the EI operator. In your callback you would increment a counter for each call.

**Availability** Available in Mac OS X v10.4 and later.

#### **Declared In**

CGPDFOperatorTable.h

# Data Types

8

#### CGPDFOperatorTableRef

An opaque type that stores callback functions for PDF operators.

typedef struct CGPDFOperatorTable \*CGPDFOperatorTableRef;

**Availability** Available in Mac OS X v10.4 and later.

**Declared In** CGPDFOperatorTable.h

# **Document Revision History**

This table describes the changes to CGPDFOperatorTable Reference.

Date	Notes
2009-03-04	Clarified memory management function use in Introduction.
2008-10-15	Added a note about not retaining and releasing this object.
2006-12-22	Made a minor technical correction.
	Changed CFRelease to CGPDFOperatorTableRelease (page 6).
2006-04-04	Updated the Introduction.
2005-04-29	First version.

#### **REVISION HISTORY**

**Document Revision History** 

# Index

### С

CGPDFOperatorCallback callback 7 CGPDFOperatorTableCreate function 6 CGPDFOperatorTableRef data type 8 CGPDFOperatorTableRelease function 6 CGPDFOperatorTableRetain function 6 CGPDFOperatorTableSetCallback function 7