
CGPDFScanner Reference

[Graphics & Imaging](#) > Quartz



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CGPDFScanner Reference

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

Overview

The `CGPDFScannerRef` opaque type is used to parse a PDF content stream. You can set up the PDF scanner object to invoke callbacks when it encounters specific PDF operators in the stream.

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 Scanner Object

[CGPDFScannerCreate](#) (page 6)
Creates a `CGPDFScanner` object.

Retaining and Releasing PDF Scanner Objects

[CGPDFScannerRetain](#) (page 12)
Increments the retain count of a scanner object.

[CGPDFScannerRelease](#) (page 11)
Decrements the retain count of a scanner object.

Parsing Content

[CGPDFScannerScan](#) (page 12)
Parses the content stream of a `CGPDFScanner` object.

[CGPDFScannerGetContentStream](#) (page 7)
Returns the content stream associated with a `CGPDFScanner` object.

Getting PDF Objects from the Scanner Stack

[CGPDFScannerPopObject](#) (page 10)

Retrieves an object from the scanner stack.

[CGPDFScannerPopBoolean](#) (page 8)

Retrieves a Boolean object from the scanner stack.

[CGPDFScannerPopInteger](#) (page 8)

Retrieves an integer object from the scanner stack.

[CGPDFScannerPopNumber](#) (page 9)

Retrieves a real value object from the scanner stack.

[CGPDFScannerPopName](#) (page 9)

Retrieves a character string from the scanner stack.

[CGPDFScannerPopString](#) (page 11)

Retrieves a string object from the scanner stack.

[CGPDFScannerPopArray](#) (page 7)

Retrieves an array object from the scanner stack.

[CGPDFScannerPopDictionary](#) (page 8)

Retrieves a PDF dictionary object from the scanner stack.

[CGPDFScannerPopStream](#) (page 10)

Retrieves a PDF stream object from the scanner stack.

Functions

CGPDFScannerCreate

Creates a CGPDFScanner object.

```
CGPDFScannerRef CGPDFScannerCreate (
    CGPDFContentStreamRef cs,
    CGPDFOperatorTableRef table,
    void *info
);
```

Parameters

cs

A CGPDFContentStream object. (See *CGPDFContentStream Reference*.)

table

A CGPDFOperatorTable object that contains callbacks for the PDF operators you want to handle.

info

A pointer to data you want passed to your CGPDFOperatorTable callback function. (See *CGPDFOperatorTable Reference*.)

Return Value

A CGPDFScanner object. You are responsible for releasing this object by calling the function `CGPDFScannerRelease`.

Discussion

When you want to parse the contents of the PDF stream, call the function [CGPDFScannerScan](#) (page 12).

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerGetContentStream

Returns the content stream associated with a CGPDFScanner object.

```
CGPDFContentStreamRef CGPDFScannerGetContentStream (
    CGPDFScannerRef scanner
);
```

Parameters

scanner

The scanner object whose content stream you want to obtain.

Return Value

Return the content stream associated with *scanner*.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopArray

Retrieves an array object from the scanner stack.

```
bool CGPDFScannerPopArray (
    CGPDFScannerRef scanner,
    CGPDFArrayRef *value
);
```

Parameters

scanner

A valid scanner object.

value

On output, points to the CGPDFArray object popped from the *scanner* stack.

Return Value

Returns `true` if *value* is retrieved successfully; `false` otherwise.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopBoolean

Retrieves a Boolean object from the scanner stack.

```
bool CGPDFScannerPopBoolean (
    CGPDFScannerRef scanner,
    CGPDFBoolean *value
);
```

Parameters

scanner

A valid scanner object.

value

On output, points to the CGPDFBoolean object popped from the scanner stack.

Return Value

Returns true if value is retrieved successfully; false otherwise.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopDictionary

Retrieves a PDF dictionary object from the scanner stack.

```
bool CGPDFScannerPopDictionary (
    CGPDFScannerRef scanner,
    CGPDFDictionaryRef *value
);
```

Parameters

scanner

A valid scanner object.

value

On output, points to the CGPDFDictionary object popped from the scanner stack.

Return Value

Returns true if value is retrieved successfully; false otherwise.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopInteger

Retrieves an integer object from the scanner stack.


```
bool CGPDFScannerPopInteger (
    CGPDFScannerRef scanner,
    CGPDFInteger *value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the CGPDFInteger object popped from the `scanner` stack.**Return Value**Returns `true` if `value` is retrieved successfully; `false` otherwise.**Availability**

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopName

Retrieves a character string from the scanner stack.

```
bool CGPDFScannerPopName (
    CGPDFScannerRef scanner,
    const char **value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the character string popped from the `scanner` stack.**Return Value**Returns `true` if `value` is retrieved successfully; `false` otherwise.**Availability**

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopNumber

Retrieves a real value object from the scanner stack.

```
bool CGPDFScannerPopNumber (
    CGPDFScannerRef scanner,
    CGPDFReal *value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the CGPDFReal object popped from the *scanner* stack.**Return Value**Returns `true` if *value* is retrieved successfully; `false` otherwise.**Discussion**

The number retrieved from the scanner can be a real value or an integer value. However, the result is always converted to a CGPDFReal data type.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopObject

Retrieves an object from the scanner stack.

```
bool CGPDFScannerPopObject (
    CGPDFScannerRef scanner,
    CGPDFObjectRef *value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the object popped from the *scanner* stack.**Return Value**Returns `true` if *value* is retrieved successfully; `false` otherwise.**Availability**

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopStream

Retrieves a PDF stream object from the scanner stack.

```
bool CGPDFScannerPopStream (
    CGPDFScannerRef scanner,
    CGPDFStreamRef *value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the CGPDFStream object popped from the *scanner* stack.**Return Value**Returns `true` if *value* is retrieved successfully; `false` otherwise.**Availability**

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerPopString

Retrieves a string object from the scanner stack.

```
bool CGPDFScannerPopString (
    CGPDFScannerRef scanner,
    CGPDFStringRef *value
);
```

Parameters*scanner*

A valid scanner object.

*value*On output, points to the CGPDFString object popped from the *scanner* stack.**Return Value**Returns `true` if *value* is retrieved successfully; `false` otherwise.**Availability**

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerRelease

Decrements the retain count of a scanner object.

```
void CGPDFScannerRelease (
    CGPDFScannerRef scanner
);
```

Parameters

scanner

The scanner object to release.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerRetain

Increments the retain count of a scanner object.

```
CGPDFScannerRef CGPDFScannerRetain (
    CGPDFScannerRef scanner
);
```

Parameters

scanner

The scanner object to retain.

Return Value

The same scanner object passed to the function in the *scanner* parameter.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

CGPDFScannerScan

Parses the content stream of a CGPDFScanner object.

```
bool CGPDFScannerScan (
    CGPDFScannerRef scanner
);
```

Parameters

scanner

The scanner object whose content stream you want to parse.

Return Value

Returns `true` if the entire stream is parsed successfully; `false` if parsing fails (for example, if the stream data is corrupted).

Discussion

The function `CGPDFScannerScan` parses the PDF content stream associated with the scanner. Each time Quartz parses a PDF operator for which you register a callback, Quartz invokes your callback.

Availability

Available in Mac OS X version 10.4 and later.

Declared In

CGPDFScanner.h

Data Types

CGPDFScannerRef

An opaque type used to parse a PDF content stream.

```
typedef struct CGPDFScanner *CGPDFScannerRef;
```

Availability

Available in Mac OS X v10.4 and later.

Declared In

CGPDFScanner.h

Document Revision History

This table describes the changes to *CGPDFScanner 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 the Introduction.
2005-04-29	First version.

REVISION HISTORY

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