MDLineage Reference

Carbon > File Management

2006-07-13

Apple Inc.
© 2006 Apple Computer, Inc.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

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

Apple, the Apple logo, Carbon, Mac, and Mac OS are trademarks of Apple Inc., registered in the United States and other countries.

Spotlight is a trademark of Apple Inc.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Contents

MDLineage Reference 5

Overview 5
Functions by Task 5
- Creating an MDLineage 5
- Adding to, and removing from, a File 5

Functions 6
- MDLineageCreate 6
- MDLineageCreateBranchFromFile 6
- MDLineageCreateFromFile 7
- MDLineageRemoveFromFile 7
- MDLineageSetOnFile 7

Document Revision History 9

Index 11

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

MDLineage Reference

Framework:	CoreServices/CoreServices.h
Companion guide	Spotlight Overview
Declared in	MDLineage.h

Overview

The MDLineage functions can be used to set, alter, and store data concerning the relationships between different versions of the same logical file. Lineage information is stored on files using extended attributes. The lineage for a file can be retrieved or searched for using the Spotlight metadata attribute `kMDItemDocumentLineage`.

Functions by Task

Creating an MDLineage

`MDLineageCreate` (page 6)
Creates and returns a new, unique lineage.

`MDLineageCreateFromFile` (page 7)
Creates and returns a new, unique lineage using data from a given file.

`MDLineageCreateBranchFromFile` (page 6)
Creates and returns a new lineage descending from a given file.

Adding to, and removing from, a File

`MDLineageSetOnFile` (page 7)
Writes the given lineage data to a given file.

`MDLineageRemoveFromFile` (page 7)
Removes any existing lineage from a given file.

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

Functions

MDLineageCreate

Creates and returns a new, unique lineage.

```
CFDictionaryRef MDLineageCreate (
    CFAllocatorRef allocator
);
```

Parameters

allocator

The allocator to use to allocate memory for the new object. Pass `NULL` or `kCFAllocatorDefault` to use the current default allocator.

Return Value

A new, globally unique lineage, or `NULL` if there was an error. Ownership follows the Create Rule.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`MDLineage.h`

MDLineageCreateBranchFromFile

Creates and returns a new lineage descending from a given file.

```
CFDictionaryRef MDLineageCreateBranchFromFile (
    CFAllocatorRef allocator,
    CFURLRef fileURL
);
```

Parameters

allocator

The allocator to use to allocate memory for the new object. Pass `NULL` or `kCFAllocatorDefault` to use the current default allocator.

file

The URL for a file from which to create branched lineage.

Return Value

A new lineage descending from the data in *fileURL*, or `NULL` if there was no lineage data associated with *fileURL* or if there was an error. Ownership follows the Create Rule.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`MDLineage.h`

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

MDLineageCreateFromFile

Creates and returns a new, unique lineage using data from a given file.

```
CFDictionaryRef MDLineageCreateFromFile (
    CFAllocatorRef allocator,
    CFURLRef fileURL
);
```

Parameters

allocator

The allocator to use to allocate memory for the new object. Pass `NULL` or `kCFAllocatorDefault` to use the current default allocator.

fileURL

The URL for a file from which to copy lineage data.

Return Value

A new, globally unique lineage using the data from *fileURL*, or `NULL` if there was no lineage data associated with *fileURL* or if there was an error. Ownership follows the Create Rule.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`MDLineage.h`

MDLineageRemoveFromFile

Removes any existing lineage from a given file.

```
Boolean MDLineageRemoveFromFile (
    CFURLRef fileURL
);
```

Parameters

file

The file from which to remove all lineage data.

Return Value

`true` if all lineage data was removed from the file at *fileURL*, otherwise `false`. If there was no lineage data on the file, returns `true`.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`MDLineage.h`

MDLineageSetOnFile

Writes the given lineage data to a given file.

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

```
MDLineageSetOnFile (
    CFDictionaryRef lineage,
    CFURLRef fileURL
);
```

Parameters

lineage

Lineage data obtained from one of the `MDLineageCreate` functions.

file

The URL for a file on which to write the lineage.

Return Value

`true` if the operation succeeded, otherwise `false`.

Discussion

This function overwrites any lineage data already marked on the file.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`MDLineage.h`

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

Document Revision History

This table describes the changes to *MDLineage Reference*.

Date	Notes
2006-07-13	New document that describes the functions that can be used to track different versions of the same logical file.

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

Document Revision History

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.

Index

M

`MDLineageCreate` function 6
`MDLineageCreateBranchFromFile` function 6
`MDLineageCreateFromFile` function 7
`MDLineageRemoveFromFile` function 7
`MDLineageSetOnFile` function 7

2006-07-13 | © 2006 Apple Computer, Inc. All Rights Reserved.