
Finder Interface Reference

[Carbon > File Management](#)



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Finder Interface Reference

Framework:	CoreServices/CoreServices.h, Carbon/Carbon.h
Declared in	Finder.h FinderRegistry.h

Overview

The Finder is an application that works with the system software to keep track of files and manage the user's desktop display. This document describes the programming interface your application should use to interact with the Finder. For example, you can use this interface to:

- Set up the resources the Finder needs to display and start up your application
- Set up the resources the Finder uses to display information about other files related to your application
- Examine or change Finder-related information stored in a volume's catalog file
- Support stationery pads

Data Types

CustomBadgeResource

```
struct CustomBadgeResource {
    SInt16 version;
    SInt16 customBadgeResourceID;
    OSType customBadgeType;
    OSType customBadgeCreator;
    OSType windowBadgeType;
    OSType windowBadgeCreator;
    OSType overrideType;
    OSType overrideCreator;
};
typedef struct CustomBadgeResource CustomBadgeResource;
typedef CustomBadgeResource * CustomBadgeResourcePtr;
```

Fields

version
 customBadgeResourceID
 customBadgeType
 customBadgeCreator
 windowBadgeType
 windowBadgeCreator
 overrideType
 overrideCreator

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

ExtendedFolderInfo

Defines an extended directory information structure. The `ExtendedFolderInfo` structure is preferred over the `DXInfo` structure.

```
struct ExtendedFolderInfo {
    Point scrollPosition;
    SInt32 reserved1;
    UInt16 extendedFinderFlags;
    SInt16 reserved2;
    SInt32 putAwayFolderID;
};
typedef struct ExtendedFolderInfo ExtendedFolderInfo;
```

Fields

scrollPosition

Scroll position within the Finder window. The Finder does not necessarily save this position immediately upon user action.

reserved1

Reserved (set to 0).

extendedFinderFlags

Extended Finder flags. See [“Extended Finder Flags”](#) (page 14).

reserved2

Reserved (set to 0).

putAwayFolderID

If the user moves the folder onto the desktop, the directory ID of the folder from which the user moves it.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

FolderInfo

Defines a directory information structure. The `FolderInfo` structure is preferred over the `DInfo` structure.

```
struct FolderInfo {
    Rect windowBounds;
    UInt16 finderFlags;
    Point location;
    UInt16 reservedField;
};
typedef struct FolderInfo FolderInfo;
```

Fields

windowBounds

The rectangle for the window that the Finder displays when the user opens the folder.

finderFlags

Finder flags. See [“Finder Flags”](#) (page 13).

location

Location of the folder in the parent window.

reservedField

Reserved. Set to 0.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

DInfo

Defines a directory information structure.

```

struct DInfo {
    Rect frRect;
    UInt16 frFlags;
    Point frLocation;
    SInt16 frView;
};
typedef struct DInfo DInfo;

```

Fields**frRect**

The rectangle for the window that the Finder displays when the user opens the folder.

frFlags

Reserved.

frLocation

Location of the folder in the parent window.

frView

The manner in which folders are displayed; this is set by the user with commands from the View menu of the Finder.

Discussion

The Finder manipulates the fields in the directory information record. Your application shouldn't have to check or set any of these fields directly

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

DXInfo

Defines an extended directory information structure.

```

struct DXInfo {
    Point frScroll;
    SInt32 frOpenChain;
    SInt8 frScript;
    SInt8 frXFlags;
    SInt16 frComment;
    SInt32 frPutAway;
};
typedef struct DXInfo DXInfo;

```

Fields**frScroll**

Scroll position within the Finder window. The Finder does not necessarily save this position immediately upon user action.

frOpenChain

Chain of directory IDs for open folders. The Finder numbers directory IDs. The Finder does not necessarily save this information immediately upon user action.

`frScript`

Extended flags. If the high-bit is set, the script system for displaying the folder's name. Ordinarily, the Finder (and the Standard File Package) displays the names of all desktop objects in the current system script, which depends on the region-specific configuration of the system. The high bit of the byte in the `fdScript` field is set by default to 0, which causes the Finder to display the folder's name in the current system script. If the high bit is set to 1, the Finder (and the Standard File Package) displays the filename and directory name in the script whose code is recorded in the remaining 7 bits. However, as of system software version 7.1, the Window Manager and Dialog Manager do not support multiple simultaneous scripts, so the system script is always used for displaying filenames and directory names in dialog boxes, window titles, and other user interface elements used by the Finder. Therefore, until the system software's script capability is fully implemented, you should treat this field as reserved.

`frXFlags`

Extended flags. See ["Extended Finder Flags"](#) (page 14).

`frComment`

Reserved (set to 0). If the high-bit is clear, an ID number for the comment that is displayed in the information window when the user selects a folder and chooses the Get Info command from the File menu. The numbers that identify comments are assigned by the Finder.

`frPutAway`

If the user moves the folder onto the desktop, the directory ID of the folder from which the user moves it.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`Finder.h`

ExtendedFileInfo

Defines an extended file information structure. The `ExtendedFileInfo` structure is preferred over the `FXInfo` structure.

```
struct ExtendedFileInfo {
    SInt16 reserved1[4];
    UInt16 extendedFinderFlags;
    SInt16 reserved2;
    SInt32 putAwayFolderID;
};
typedef struct ExtendedFileInfo ExtendedFileInfo;
```

Fields`reserved1`

Reserved (set to 0).

`extendedFinderFlags`

Extended flags. See ["Extended Finder Flags"](#) (page 14).

`reserved2`

Reserved (set to 0).

`putAwayFolderID`

If the user moves the file onto the desktop, the directory ID of the folder from which the user moves the file.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

FileInfo

Defines a file information structure. The `FileInfo` structure is preferred over the `FInfo` structure.

```
struct FileInfo {
    OSType fileType;
    OSType fileCreator;
    UInt16 finderFlags;
    Point location;
    UInt16 reservedField;
};
typedef struct FileInfo FileInfo;
```

Fields

`fileType`

File type.

`fileCreator`

The signature of the application that created the file.

`finderFlags`

Finder flags. See [“Finder Flags”](#) (page 13).

`location`

The location--specified in coordinates local to the window--of the file's icon within its window.

`reservedField`

The window in which the file's icon appears; this information is meaningful only to the Finder.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

FInfo

Defines a file information structure.

```

struct FInfo {
    OSType fdType;
    OSType fdCreator;
    UInt16 fdFlags;
    Point fdLocation;
    SInt16 fdFldr;
};
typedef struct FInfo FInfo;

```

Fields

fdType

File type.

fdCreator

The signature of the application that created the file.

fdFlags

Finder flags. See “Finder Flags” (page 13).

fdLocation

The location--specified in coordinates local to the window--of the file's icon within its window.

fdFldr

The window in which the file's icon appears; this information is meaningful only to the Finder.

Discussion

You typically set a file's type and creator when you create the file. The Finder manipulates the other fields in the file information record, which is a data structure of type `FInfo`. After you have created a file, you can use the File Manager function `FSpGetFInfo` to return the file information record, then change the `fdType` and `fdCreator` fields by using the File Manager function `FSpSetFInfo`.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

FXInfo

Defines an extended file information structure.

```

struct FXInfo {
    SInt16 fdIconID;
    SInt16 fdReserved[3];
    SInt8 fdScript;
    SInt8 fdXFlags;
    SInt16 fdComment;
    SInt32 fdPutAway;
};
typedef struct FXInfo FXInfo;

```

Fields

fdIconID

An ID number for the file's icon; the numbers that identify icons are assigned by the Finder.

fdReserved

Reserved.

fdScript

Extended flags. Script code if high-bit is set.

fdXFlags

Extended flags.

fdComment

Reserved (set to 0). If the high-bit is clear, an ID number for the comment that is displayed in the information window when the user selects a file and chooses the Get Info command from the File menu. The numbers that identify comments are assigned by the Finder.

fdPutAway

If the user moves the file onto the desktop, the directory ID of the folder from which the user moves the file.

Discussion

The Finder manipulates the fields in the extended file information records ; your application shouldn't have to check or set any of these fields directly.

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

RoutingResourceEntry

```
struct RoutingResourceEntry {
    OSType creator;
    OSType fileType;
    OSType targetFolder;
    OSType destinationFolder;
    OSType reservedField;
};
typedef struct RoutingResourceEntry RoutingResourceEntry;
typedef RoutingResourceEntry * RoutingResourcePtr;
```

Fields

creator

fileType

targetFolder

destinationFolder

reservedField

Availability

Available in Mac OS X v10.0 and later.

Declared In

Finder.h

Constants

Finder Flags

Specify flags used by the Finder.

```
enum {
    kIsOnDesk = 0x0001,
    kColor = 0x000E,
    kIsShared = 0x0040,
    kHasNoINITs = 0x0080,
    kHasBeenInited = 0x0100,
    kHasCustomIcon = 0x0400,
    kIsStationery = 0x0800,
    kNameLocked = 0x1000,
    kHasBundle = 0x2000,
    kIsInvisible = 0x4000,
    kIsAlias = 0x8000
};
```

Constants

`kIsOnDesk`

Unused and reserved in System 7; set to 0.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kColor`

Three bits of color coding.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kIsShared`

The file is an application that can be executed by multiple users simultaneously. Defined only for applications; otherwise, set to 0.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kHasNoINITs`

The file contains no 'INIT' resources; set to 0. Reserved for directories; set to 0.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kHasBeenInited`

The Finder has recorded information from the file's bundle resource into the desktop database and given the file or folder a position on the desktop.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kHasCustomIcon`

The file or directory contains a customized icon.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kIsStationery`

For a file, this bit indicates that the file is a stationery pad. For directories, this bit is reserved--in which case, set to 0.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kNameLocked`

The file or directory can't be renamed from the Finder, and the icon cannot be changed.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kHasBundle`

For a file, this bit indicates that the file contains a bundle resource. For a directory, this bit indicates that the directory is a file package. Note that not all file packages have this bit set; many file packages are identified by other means, such as a recognized package extension in the name. The proper way to determine if an item is a package is through Launch Services.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kIsInvisible`

The file or directory is invisible from the Finder and from the Navigation Services dialogs.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kIsAlias`

For a file, this bit indicates that the file is an alias file. For directories, this bit is reserved--in which case, set to 0.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

Extended Finder Flags

Define flags used by the extended file and folder information structures.

```
enum {
    kExtendedFlagsAreInvalid = 0x8000,
    kExtendedFlagHasCustomBadge = 0x0100,
    kExtendedFlagHasRoutingInfo = 0x0004
};
```

Constants

`kExtendedFlagsAreInvalid`

If set the other extended flags are ignored.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kExtendedFlagHasCustomBadge`

Set if the file or folder has a badge resource.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

`kExtendedFlagHasRoutingInfo`

Set if the file contains routing info resource.

Available in Mac OS X v10.0 and later.

Declared in `Finder.h`.

Finder Error Codes

```
enum {
    errFinderIsBusy = -15260,
    errFinderWindowNotOpen = -15261,
    errFinderCannotPutAway = -15262,
    errFinderWindowMustBeIconView = -15263,
    errFinderWindowMustBeListView = -15264,
    errFinderCantMoveToDestination = -15265,
    errFinderCantMoveSource = -15266,
    errFinderCantOverwrite = -15267,
    errFinderIncestuousMove = -15268,
    errFinderCantMoveToAncestor = -15269,
    errFinderCantUseTrashedItems = -15270,
    errFinderItemAlreadyInDest = -15271,
    errFinderUnknownUser = -15272,
    errFinderSharePointsCantInherit = -15273,
    errFinderWindowWrongType = -15274,
    errFinderPropertyNowWindowBased = -15275,
    errFinderAppFolderProtected = -15276,
    errFinderSysFolderProtected = -15277,
    errFinderBoundsWrong = -15278,
    errAEValueOutOfRange = -15279,
    errFinderPropertyDoesNotApply = -15280,
    errFinderFileSharingMustBeOn = -15281,
    errFinderMustBeActive = -15282,
    errFinderVolumeNotFound = -15283,
    errFinderLockedItemsInTrash = -15284,
    errFinderOnlyLockedItemsInTrash = -15285,
    errFinderProgramLinkingMustBeOn = -15286,
    errFinderWindowMustBeButtonView = -15287,
    errFinderBadPackageContents = -15288,
    errFinderUnsupportedInsidePackages = -15289,
    errFinderCorruptOpenFolderList = -15290,
    errFinderNoInvisibleFiles = -15291,
    errFinderCantDeleteImmediately = -15292,
    errFinderLastReserved = -15379
};
```

Finder Events

```
enum {
    kAECleanUp = 'fclu',
    kAEEject = 'ejct',
    kAEEEmpty = 'empt',
    kAEErase = 'fera',
    kAEGestalt = 'gstl',
    kAEPutAway = 'ptwy',
    kAERebuildDesktopDB = 'rddb',
    kAESync = 'fupd',
    kAEInterceptOpen = 'fopn'
};
```

kAEDatabaseSuite


```
enum {
    kAEDatabaseSuite = 'DATA',
    kAESort = 'SORT'
};
```

kAEFinderSuite

```
enum {
    kAEFinderSuite = 'fndr'
};
```

cAliasFile

```
enum {
    cAliasFile = 'alia',
    cApplicationFile = 'appf',
    cControlPanelFile = 'ccd',
    cDeskAccessoryFile = 'dafi',
    cDocumentFile = 'docf',
    cFontFile = 'fntf',
    cSoundFile = 'sndf',
    cClippingFile = 'clpf',
    cContainer = 'ctnr',
    cDesktop = 'cdsk',
    cSharableContainer = 'sctr',
    cDisk = 'cdis',
    cFolder = 'cfol',
    cSuitcase = 'stcs',
    cAccessorySuitcase = 'dsut',
    cFontSuitcase = 'fsut',
    cTrash = 'ctrs',
    cDesktopPrinter = 'dskp',
    cPackage = 'pack',
    cContentSpace = 'dwnd',
    cContainerWindow = 'cwnd',
    cInfoWindow = 'iwnd',
    cSharingWindow = 'swnd',
    cStatusWindow = 'qwnd',
    cClippingWindow = 'lwnd',
    cPreferencesWindow = 'pwnd',
    cDTPWindow = 'dtpw',
    cProcess = 'prcs',
    cAccessoryProcess = 'pcda',
    cApplicationProcess = 'pcap',
    cGroup = 'sgrp',
    cUser = 'cuse',
    cSharingPrivileges = 'priv',
    cPreferences = 'cprf',
    cLabel = 'clbl',
    cSound = 'snd',
    cAliasList = 'alst',
    cSpecialFolders = 'spfl',
    cOnlineDisk = 'cods',
    cOnlineLocalDisk = 'clds',
```

```

    cOnlineRemoteDisk = 'crds',
    cEntireContents = 'ects',
    cIconFamily = 'ifam'
};

```

cInternalFinderObject

```

enum {
    cInternalFinderObject = 'obj '
};

```

enumAllDocuments

```

enum {
    enumAllDocuments = 'alld',
    enumFolders = 'fold',
    enumAliases = 'alia',
    enumStationery = 'stat'
};

```

enumArrangement

```

enum {
    enumArrangement = 'earr'
};

```

enumDate

```

enum {
    enumDate = 'enda',
    enumAnyDate = 'anyd',
    enumToday = 'tday',
    enumYesterday = 'yday',
    enumThisWeek = 'twek',
    enumLastWeek = 'lwek',
    enumThisMonth = 'tmon',
    enumLastMonth = 'lmon',
    enumThisYear = 'tyer',
    enumLastYear = 'lyer',
    enumBeforeDate = 'bfdt',
    enumAfterDate = 'afdt',
    enumBetweenDate = 'btdt',
    enumOnDate = 'ondt'
};

```

enumIconSize

```

enum {

```

```

enumIconSize = 'isiz',
enumSmallIconSize = pSmallIcon,
enumMiniIconSize = 'miic',
enumLargeIconSize = 'lgic'
};

```

enumInfoWindowPanel

```

enum {
enumInfoWindowPanel = 'ipnl',
enumGeneralPanel = 'gpnl',
enumSharingPanel = 'spnl',
enumStatusNConfigPanel = 'scnl',
enumFontsPanel = 'fpnl',
enumMemoryPanel = 'mpnl'
};

```

enumPrefsWindowPanel

```

enum {
enumPrefsWindowPanel = 'pple',
enumPrefsGeneralPanel = 'pgnp',
enumPrefsLabelPanel = 'plbp',
enumPrefsIconViewPanel = 'pivp',
enumPrefsButtonViewPanel = 'pbvp',
enumPrefsListViewPanel = 'plvp'
};

```

enumSortDirection

```

enum {
enumSortDirection = 'sodr',
enumSortDirectionNormal = 'snrm',
enumSortDirectionReverse = 'srvs'
};

```

enumViewBy

```

enum {
enumViewBy = 'vwby',
enumGestalt = 'gsen',
enumConflicts = 'cflc',
enumExistingItems = 'exsi',
enumOlderItems = 'oldr'
};

```

enumWhere

```
enum {
    enumWhere = 'wher',
    enumAllLocalDisks = 'aldk',
    enumAllRemoteDisks = 'ardk',
    enumAllDisks = 'alld',
    enumAllOpenFolders = 'aofO'
};
```

fOnDesk

Obsolete. Use the constants described in "Finder Flags."

```
enum {
    fOnDesk = kIsOnDesk,
    fHasBundle = kHasBundle,
    fInvisible = kIsInvisible
};
```

formAlias

```
enum {
    formAlias = typeAlias,
    formCreator = pFileCreator
};
```

fTrash

Obsolete.

```
enum {
    fTrash = -3,
    fDesktop = -2,
    fDisk = 0
};
```

Clipping File Creator and Types

```
enum {
    kClippingCreator = 'drag',
    kClippingPictureType = 'clpp',
    kClippingTextType = 'clpt',
    kClippingSoundType = 'clps',
    kClippingUnknownType = 'clpu'
};
```

kContainerFolderAliasType

```
enum {
    kContainerFolderAliasType = 'fdrp',
    kContainerTrashAliasType = 'trsh',
    kContainerHardDiskAliasType = 'hdsk',
    kContainerFloppyAliasType = 'flpy',
    kContainerServerAliasType = 'srvr',
    kApplicationAliasType = 'adrp',
    kContainerAliasType = 'drop',
    kDesktopPrinterAliasType = 'dtpa',
    kContainerCDROMAliasType = 'cddr',
    kApplicationCPAliasType = 'acdpr',
    kApplicationDAAliasType = 'addpr',
    kPackageAliasType = 'fpka',
    kAppPackageAliasType = 'fapa'
};
```

kCustomBadgeResourceType

```
enum {
    kCustomBadgeResourceType = 'badg',
    kCustomBadgeResourceID = kCustomIconResource,
    kCustomBadgeResourceVersion = 0
};
```

kCustomIconResource

```
enum {
    kCustomIconResource = -16455
};
```

kExportedFolderAliasType

```
enum {
    kExportedFolderAliasType = 'faet',
    kDropFolderAliasType = 'fadr',
    kSharedFolderAliasType = 'fash',
    kMountedFolderAliasType = 'famn'
};
```

keyASPrepositionHas

```
enum {
    keyASPrepositionHas = 'has ',
    keyAll = 'kya1',
    keyOldFinderItems = 'fse1'
};
```

Constants

keyASPrepositionHas
Available in Mac OS X v10.0 and later.
Declared in FinderRegistry.h.

keyAll
Available in Mac OS X v10.0 and later.
Declared in FinderRegistry.h.

keyOldFinderItems
Available in Mac OS X v10.0 and later.
Declared in FinderRegistry.h.

keyIconAndMask

```
enum {
    keyIconAndMask = 'ICN#',
    key32BitIcon = 'il32',
    key8BitIcon = 'icl8',
    key4BitIcon = 'icl4',
    key8BitMask = 'l8mk',
    keySmallIconAndMask = 'ics#',
    keySmall8BitIcon = 'ics8',
    keySmall4BitIcon = 'ics4',
    keySmall32BitIcon = 'is32',
    keySmall8BitMask = 's8mk',
    keyMini1BitMask = 'icm#',
    keyMini4BitIcon = 'icm4',
    keyMini8BitIcon = 'icm8',
    keyAEUsing = 'usin',
    keyAEReplacing = 'alrp',
    keyAENoAutoRouting = 'rout',
    keyLocalPositionList = 'mvpl',
    keyGlobalPositionList = 'mvpq',
    keyRedirectedDocumentList = 'fddl'
};
```

Constants

keyIconAndMask

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

key32BitIcon

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

key8BitIcon

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

key4BitIcon

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

key8BitMask

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

keySmallIconAndMask

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

keySmall8BitIcon

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

keySmall4BitIcon

Available in Mac OS X v10.0 and later.

Declared in FinderRegistry.h.

- `keySmall32BitIcon`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keySmall8BitMask`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyMini1BitMask`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyMini4BitIcon`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyMini8BitIcon`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyAEUsing`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyAEReplacing`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyAENoAutoRouting`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyLocalPositionList`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyGlobalPositionList`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.
- `keyRedirectedDocumentList`
 - Available in Mac OS X v10.0 and later.
 - Declared in `FinderRegistry.h`.

kFirstMagicBusyFiletype

```
enum {
    kFirstMagicBusyFiletype = 'bzy ',
    kLastMagicBusyFiletype = 'bzy?'
};
```

kInternetLocationCreator

```
enum {
    kInternetLocationCreator = 'drag',
    kInternetLocationHTTP = 'ilht',
    kInternetLocationFTP = 'ilft',
    kInternetLocationFile = 'ilfi',
    kInternetLocationMail = 'ilma',
    kInternetLocationNNTP = 'ilnw',
    kInternetLocationAFP = 'ilaf',
    kInternetLocationAppleTalk = 'ilat',
    kInternetLocationNSL = 'ilns',
    kInternetLocationGeneric = 'ilge'
};
```

kIsStationary

```
enum {
    kIsStationary = kIsStationery
};
```

kMagicBusyCreationDate

```
enum {
    kMagicBusyCreationDate = 0x4F3AFDB0
};
```

kRoutingResourceType

```
enum {
    kRoutingResourceType = 'rout',
    kRoutingResourceID = 0
};
```

kSystemFolderAliasType

```
enum {
    kSystemFolderAliasType = 'fasy',
    kAppleMenuFolderAliasType = 'faam',
    kStartupFolderAliasType = 'fast',
};
```

```

kPrintMonitorDocsFolderAliasType = 'fapn',
kPreferencesFolderAliasType = 'fapf',
kControlPanelFolderAliasType = 'fact',
kExtensionFolderAliasType = 'faex'
};

```

pAboutMacintosh

```

enum {
    pAboutMacintosh = 'abbx',
    pAppleMenuItemsFolder = 'amnu',
    pControlPanelsFolder = 'ctrl',
    pDesktop = 'desk',
    pExtensionsFolder = 'extn',
    pFinderPreferences = 'pfrp',
    pFontsFolder = 'font',
    pFontsFolderPreAllegro = 'ffnt',
    pLargestFreeBlock = 'mfre',
    pPreferencesFolder = 'pref',
    pShortCuts = 'scut',
    pShutdownFolder = 'shdf',
    pStartupItemsFolder = 'strt',
    pSystemFolder = 'macs',
    pTemporaryFolder = 'temp',
    pViewPreferences = 'pvwp',
    pStartingUp = 'awak'
};

```

pApplicationFile

```

enum {
    pApplicationFile = cApplicationFile
};

```

pCanConnect

```

enum {
    pCanConnect = 'ccon',
    pCanChangePassword = 'ccpw',
    pCanDoProgramLinking = 'ciac',
    pIsOwner = 'isow',
    pARADialIn = 'arad',
    pShouldCallBack = 'calb',
    pCallBackNumber = 'cbnm'
};

```

pCapacity

```

enum {
    pCapacity = 'capa',
};

```

```

    pEjectable = 'isej',
    pFreeSpace = 'frsp',
    pLocal = 'isrv',
    pIsStartup = 'istd'
};

```

pComment

```

enum {
    pComment = 'comt',
    pContainer = cContainer,
    pContentSpace = cContentSpace,
    pCreationDateOld = 'crt'd',
    pCreationDate = 'asc'd',
    pDescription = 'dscr',
    pDisk = cDisk,
    pFolderOld = cFolder,
    pFolder = 'asdr',
    pIconBitmap = 'iimg',
    pInfoWindow = cInfoWindow,
    pKind = 'kind',
    pLabelIndex = 'labi',
    pModificationDateOld = 'modd',
    pModificationDate = 'asmo',
    pPhysicalSize = 'phys',
    pPosition = 'posn',
    pIsSelected = 'issl',
    pSize = pPointSize,
    pWindow = cWindow,
    pPreferencesWindow = cPreferencesWindow
};

```

pCompletelyExpanded

```

enum {
    pCompletelyExpanded = 'pexc',
    pContainerWindow = cContainerWindow,
    pEntireContents = cEntireContents,
    pExpandable = 'pexa',
    pExpanded = 'pexp',
    pPreviousView = 'svev',
    pView = 'pvev',
    pIconSize = pListViewIconSize,
    pKeepArranged = 'arrg',
    pKeepArrangedBy = 'arby'
};

```

pDeskAccessoryFile

```

enum {
    pDeskAccessoryFile = cDeskAccessoryFile
};

```

pFile

```
enum {
    pFile = cFile,
    pPartitionSpaceUsed = 'pusd',
    pLocalAndRemoteEvents = 'revt',
    pHasScriptingTerminology = 'hscr'
};
```

pFileCreator

```
enum {
    pFileCreator = 'fprt',
    pFileType = 'asty',
    pFileTypeOld = 'fitp',
    pIsLocked = 'aslk',
    pIsLockedOld = 'islk',
    pProductVersion = 'ver2'
};
```

pFileShareOn

```
enum {
    pFileShareOn = 'fshr',
    pFileShareStartingUp = 'fsup',
    pProgramLinkingOn = 'iac '
};
```

pInfoPanel

```
enum {
    pInfoPanel = 'panl'
};
```

pInternetLocation

```
enum {
    pInternetLocation = 'iloc'
};
```

pIsZoomedFull

```
enum {
    pIsZoomedFull = 'zumf',
    pIsPopup = 'drwr',
    pIsPulledOpen = 'pull',
    pIsCollapsed = 'wshd'
};
```

```
};
```

pMinAppPartition

```
enum {
    pMinAppPartition = 'mprt',
    pAppPartition = 'appt',
    pSuggestedAppPartition = 'sprt',
    pIsScriptable = 'isab'
};
```

pNoArrangement

```
enum {
    pNoArrangement = 'narr',
    pSnapToGridArrangement = 'grda',
    pByNameArrangement = 'nama',
    pByModificationDateArrangement = 'mdta',
    pByCreationDateArrangement = 'cdta',
    pBySizeArrangement = 'siza',
    pByKindArrangement = 'kina',
    pByLabelArrangement = 'laba'
};
```

pObject

```
enum {
    pObject = cObject
};
```

pOriginalItem

```
enum {
    pOriginalItem = 'orig'
};
```

pOwner

```
enum {
    pOwner = 'sown',
    pOwnerPrivileges = 'ownr',
    pGroup = cGroup,
    pGroupPrivileges = 'gppr',
    pGuestPrivileges = 'gstp',
    pArePrivilegesInherited = 'iprv',
    pExported = 'sexp',
    pMounted = 'smou',
    pSharingProtection = 'spro',
};
```

```

    pSharing = 'shar',
    pSharingWindow = cSharingWindow
};

```

pSeeFiles

```

enum {
    pSeeFiles = 'prvr',
    pSeeFolders = 'prvs',
    pMakeChanges = 'prvw'
};

```

pSharableContainer

```

enum {
    pSharableContainer = cSharableContainer
};

```

pShowFolderSize

```

enum {
    pShowFolderSize = 'sfsz',
    pShowComment = 'scom',
    pShowDate = 'sdat',
    pShowCreationDate = 'scda',
    pShowKind = 'sknd',
    pShowLabel = 'slbl',
    pShowSize = 'ssiz',
    pShowVersion = 'svrs',
    pSortDirection = 'sord',
    pShowDiskInfo = 'sdin',
    pListViewIconSize = 'lvis',
    pGridIcons = 'fgrd',
    pStaggerIcons = 'fstg',
    pViewFont = 'vfnt',
    pViewFontSize = 'vfsz'
};

```

pShowModificationDate

```

enum {
    pShowModificationDate = pShowDate,
    pUseRelativeDate = 'urdt',
    pDelayBeforeSpringing = 'dela',
    pSpringOpenFolders = 'sprg',
    pUseShortMenus = 'usme',
    pUseWideGrid = 'uswg',
    pLabel1 = 'lb11',
    pLabel2 = 'lb12',
    pLabel3 = 'lb13',
};

```

```

    pLabel14 = 'lb14',
    pLabel15 = 'lb15',
    pLabel16 = 'lb16',
    pLabel17 = 'lb17',
    pDefaultIconViewIconSize = 'iisz',
    pDefaultButtonViewIconSize = 'bisz',
    pDefaultListViewIconSize = 'lisz',
    pIconViewArrangement = 'iarr',
    pButtonViewArrangement = 'barr'
};

```

pSmallIcon

```

enum {
    pSmallIcon = 'smic',
    pSmallButton = 'smbu',
    pLargeButton = 'lgbu',
    pGrid = 'grid'
};

```

pSound

```

enum {
    pSound = 'snd '
};

```

pStartupDisk

```

enum {
    pStartupDisk = 'sdsk',
    pTrash = 'trsh'
};

```

pWarnOnEmpty

```

enum {
    pWarnOnEmpty = 'warn'
};

```

typeIconFamily

```

enum {
    typeIconFamily = cIconFamily,
    typeIconAndMask = 'ICN#',
    type8BitMask = 'l8mk',
    type32BitIcon = 'il32',
    type8BitIcon = 'icl8',
    type4BitIcon = 'icl4',
};

```

```

typeSmallIconAndMask = 'ics#',
typeSmall8BitMask = 's8mk',
typeSmall32BitIcon = 'is32',
typeSmall8BitIcon = 'ics8',
typeSmall4BitIcon = 'ics4',
typeRelativeTime = 'rtim',
typeConceptualTime = 'timc'
};

```

Result Codes

The most common result codes returned by Finder Interface are listed below.

Result Code	Value	Description
errOffsetInvalid	-1800	Available in Mac OS X v10.0 and later.
errOffsetIsOutsideOfView	-1801	Available in Mac OS X v10.0 and later.
errTopOfDocument	-1810	Available in Mac OS X v10.0 and later.
errTopOfBody	-1811	Available in Mac OS X v10.0 and later.
errEndOfDocument	-1812	Available in Mac OS X v10.0 and later.
errEndOfBody	-1813	Available in Mac OS X v10.0 and later.
desktopDamagedErr	-1305	The desktop database has become corrupted Available in Mac OS X v10.0 and later.

Document Revision History

This table describes the changes to *Finder Interface Reference*.

Date	Notes
2006-10-31	Updated the description of the Finder flag <code>kHasBundle</code> .
2005-07-07	Fixed typo.
2003-02-01	Updated formatting

REVISION HISTORY

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