Error Handler Reference

Carbon > Performance

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Contents

Error Handler Reference 5

Overview 5
Functions 5
SysError 5
Data Types 6
OSErr 6
OSStatus 6

Document Revision History 9

Index 11

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Error Handler Reference

Framework:	CoreServices/CoreServices.h
Declared in	IOMacOSTypes.h MacErrors.h OSTypes.h

Overview

In Mac OS 9, Error Handler provides a system service that displays system alerts seen during startup, and assumes control when certain low-level errors occur. For detailed information, see the chapter "System Error Handler" in *Inside Macintosh: Operating System Utilities*. A PDF version of this chapter is available at http://developer.apple.com/documentation/mac/pdf/Operating_System_Utilities/pdf.html.

Note: In Mac OS X, Error Handler is no longer used for this purpose—for more information, see `SysError` (page 5).

The header `MacErrors.h` defines result codes that are used by many Carbon functions to indicate their return status. Developers can also define custom result codes for their own applications, using the range 1000 through 9999 inclusive (Apple reserves all values outside of this range for internal use.) For more information, see Technical Q&A OV02 at http://developer.apple.com/qa/ov/ov02.html.

Functions

SysError

In Mac OS 9, displays a low-level system alert or dialog. The appearance and semantics of the alert or dialog can vary, depending on the error code passed in.

Not recommended

```
void SysError (
   short errorCode
);
```

Parameters

errorCode

A value or code that indicates a specific condition.

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Discussion
A Carbon application running in Mac OS 9 can use this function to simulate a low-level system error. To exit in a more graceful manner when a serious error occurs, your application should call `ExitToShell` instead.

In Mac OS X, this function:

1. Prints a message containing the value of `errorCode` in the console log. Does not display a system alert or dialog.
2. If the variable `USERBREAK` is defined in the process environment, raises a `SIGINT` signal. Otherwise, returns control to the caller.

If a signal is raised and the caller does not handle the signal, the calling process is automatically terminated.

Availability
Not recommended in Carbon. Available in CarbonLib 1.0 and later when running Mac OS 8.1 or later. Available in Mac OS X 10.0 and later.

Declared In
`MacErrors.h`

Data Types

OSErr

A numeric code used in Carbon to indicate the return status of a function.

```
typedef SInt16 OSErr;
```

Discussion
The system software sometimes uses error codes to inform an application that a requested service is not possible. Many functions return a result code of type `OSErr` that indicates whether the function completed successfully, and if not, what the reason for failure was.

Availability
Available in Mac OS X v10.0 and later.

Declared In
`IOMacOSTypes.h`

OSStatus

A numeric code used in Carbon to indicate the return status of a function.

```
typedef SInt32 OSStatus;
```

Discussion
The system software sometimes uses error codes to inform an application that a requested service is not possible. Many functions return a result code of type `OSStatus` that indicates whether the function completed successfully, and if not, what the reason for failure was.

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If you want to use `OSStatus` to define error codes for your application, Apple recommends that you use values in the range 1000 through 9999 inclusive. Values outside of this range are reserved by Apple for internal use.

Availability
Available in Mac OS X v10.0 and later.

Declared In
`OSTypes.h`

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Document Revision History

This table describes the changes to *Error Handler Reference*.

Date	Notes
2003-01-01	Added information on the semantics of the `SysError` function in Mac OS X.
2002-10-01	Added descriptions of `OSStatus` and `OSErr`. Added information about using `OSStatus` for application-specific result codes.
2001-07-01	First version of this document.

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Document Revision History

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Index

O

`OSErr` data type 6
`OSStatus` data type 6

S

`SysError` function 5

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