

## Quit Application Event

To handle the **Quit Application event**, your application should take any actions that are necessary before it is terminated (such as saving any open documents). The following program shows an example of a handler for the **Quit Application event**.

When appropriate, the Finder sends your application a **Quit Application event** immediately after a Print Documents event. The Finder also sends your application a **Quit Application event** if the user chooses **Restart** or **Shut Down** from the Finder's **Special** menu.

```
// A handler for the Quit Application event

// Assuming inclusion of <MacHeaders>

#include <AppleEvents.h>
pascal OSErr MyHandleQuit (AppleEvent *theAppleEvent, AppleEvent *reply,
                           long handlerRefcon);
OSErr MyGotRequiredParams (AppleEvent *theAppleEvent);
Boolean MyPrepareToTerminate (void);

pascal OSErr MyHandleQuit (AppleEvent *theAppleEvent, AppleEvent *reply,
                           long handlerRefcon)
{
    Boolean    userCanceled;
    OSErr    myErr;

    // check for missing required parameters
    myErr = MyGotRequiredParams(theAppleEvent);
    if (myErr) {
        // an error occurred: do the necessary error handling
        return myErr;
    }
    userCanceled = MyPrepareToTerminate();
    if (userCanceled)
        return userCanceledErr;
    else
        return noErr;
}
```

The handler in this program calls another function supplied by the application, the **MyPrepareToTerminate** function. This function saves the documents for any open windows and returns a Boolean value that indicates whether the **Quit** request was canceled by the user. This is another example of isolating code for interacting with the user from the code that performs the requested action. Structuring your application in this way allows your application to use the same routine when responding to a user event (such as choosing the **Quit** command from the **File** menu) or to the corresponding Apple event.

Note that your handler must not call the **ExitToShell** procedure. In the program above, the application calls the **ExitToShell** procedure only if the handler returns noErr as its function result.

A listing of **MyGotRequiredParams** may be found under **Writing Apple Event Handlers**.