## Receiving Apple Events From the Edition Manager

Applications that use the **Edition Manager** must support <u>Apple events</u>. This requires that your application support the required **Open Documents** event and <u>Apple events</u> sent by the **Edition Manager**. See the description of **Open Documents** in the <u>Apple Event Manager</u>.

<u>Apple events</u> sent by the <u>Edition Manager</u> arrive as high-level events. The **EventRecord** data type defines the event record.

The **Edition Manager** can send the following Apple events:

- Section Read events ('sect' 'read')
- Section Write events ('sect' 'writ')
- Section Cancel events ('sect' 'cncl')
- Section Scroll events ('sect' 'scrl')

Each time your application creates a publisher or a subscriber, the **Edition Manager** registers its section. When an edition is updated, the **Edition Manager** scans its list to locate registered subscribers. For each registered subscriber that is set up to receive updated editions automatically, your application receives a Section Read event.

If the <u>Edition Manager</u> discovers that an edition file is missing while registering a publisher, it creates a new edition file and sends the publisher a Section Write event.

When you receive a Section Cancel event, you need to cancel the specified section. Note that the current **Edition Manager** does not send you Section Cancel events, but you do need to provide a handler for future expansion.

If the user selects a subscriber within a document and then selects the menu command, **Open Publisher** in the subscriber options dialog box, the publishing application receives the <u>Open Documents event</u> and opens the document containing the publisher. The publishing application also receives a Section Scroll event. Scroll to the location of the publisher, display this section on the user's screen, and turn on its border.

See <u>Opening and Closing a Document Containing Sections</u> for detailed information on registering and unregistering a section and writing data to an edition. See <u>Using Publisher and Subscriber Options</u> for information on publisher and subscriber options.

After receiving an Apple event sent by the **Edition Manager**, use the **Apple Event Manager** to extract the <u>section handle</u>. In addition, you must also call the **IsRegisteredSection** function to determine whether the section is registered. It is possible (due to a race condition) to receive an event for a section that you recently disposed of or unregistered. One way to ensure that an event corresponds to a valid section is to call the **IsRegisteredSection** function after you receive an event.

err = <u>IsRegisteredSection</u> (sectionH);

The following Listing illustrates how to use the <u>Apple Event Manager</u> and install an event handler to handle Section Read events. You can write similar code for Section Write events, Section Scroll events, and Section Cancel events.

// Accepting Section Read events and verifying if a section is registered

```
// Assuming inclusion of <Macheaders>
#include < Apple Events.h >
#include <Editions.h>
// Make sure you place the following call in your initialization code
//MyErr = <u>AEInstallEventHandler(sectionEventMsgClass</u>,
//
                      sectionReadMsgID, &MyHandleSectionReadEvent,
//
                      O,FALSE);
// This the correct prototype for MyHandleSectionReadEvent
pascal <u>OSErr</u> MyHandleSectionReadEvent(<u>AppleEvent,AppleEvent,long</u>);
//This is the routine the Apple Event Manager calls when a Section Read
// event arrives.
pascal OSErr MyHandleSectionReadEvent(AppleEvent theAppleEvent,
   AppleEvent reply, long refCon)
{
   OSErr getErr;
   SectionHandle sectionH;
   // Prototype user defined functions
   OSErr GetSectionHandleFromEvent(AppleEvent, SectionHandle *);
   OSErr DoSectionRead(SectionHandle);
   //Get section handle out of Apple event message buffer.
   getErr = GetSectionHandleFromEvent(theAppleEvent, &sectionH);
   if (getErr == noErr) {
       //Do nothing if section is not registered.
       if (<u>IsRegisteredSection</u>(sectionH) == <u>noErr</u>)
           return DoSectionRead(sectionH);
   }
   else
       return getErr;
}
// The following routine should read in subscriber data and update its
// display.
```

```
OSErr DoSectionRead(SectionHandle subscriber)
{
    // Your code here.
}
// This is part of your Apple event-handling code.
OSErr GetSectionHandleFromEvent (AppleEvent theAppleEvent,
       SectionHandle *sectionH)
{
   DescType ignoreType;
   Size ignoreSize;
   // Parse section handle out of message buffer.
   return <u>AEGetParamPtr</u>(&theAppleEvent, // event to parse
                 keyDirectObject, // Look for direct object
                 typeSectionH, // Want a Sectionhandle type
                 &ignoreType, // Ignore type it could get
                  (Ptr)&sectionH, // Put SectionHandle here
                 sizeof(sectionH), // size of storage for sectionhandle
                 &ignoreSize
                                 // Ignore storage it used
                 );
}
```