Sending Events Between Applications

The Macintosh Operating System provides routines that allow your application to send and receive events using the **Apple Event Manager** and **Event Manager**. The **Event Manager** provides a general method for communication between applications. The **Apple Event Manager** provides a standard method of communication between applications using the Apple Event Interprocess Messaging Protocol. (The **PPC Toolbox** can be used to read and write low-level message blocks and is more useful for applications that are closely integrated or perform coordinated tasks.)

Using the **Apple Event Manager** or **Event Manager**, applications can send events to other applications to request services or information. You can send these events between applications on the same computer or between applications located on different computers on a network. The **Apple Event Manager** uses the services of the **Event Manager** to send and receive Apple events. The **Event Manager** uses the communication services of the **PPC Toolbox** on behalf of your application to send and receive events.

For high-level events and Apple events, the applications involved must agree on what they can ask each other and on the action that should be taken in each situation. Both the application sending the event and the application receiving the event must agree on the protocol of communication.

Your application should support at least the required set of Apple events sent by the Operating System. If you plan to implement publish and subscribe capabilities, your application should also support the Apple events sent by the **Edition Manager**. You can also implement other common Apple events or design your own customized Apple events. In addition, sets of Apple events exist for many specific categories of applications (for example, word processors or spreadsheets).

If your application acts on an Apple event, it should perform the standard action requested by that event. This helps ensure that other applications (and eventually users) can send an event to a particular type of application and expect the other application to understand and act on the event in a standard way.

In most cases, you should use Apple events to communicate with other applications. However, if necessary, you can implement your own protocol for high-level events. The Figure below shows how two applications might use high-level events. For example, a user might need to update the telephone numbers of everyone in the marketing department. To accomplish this, the user might use a word-processing application to send a high-level event with the new telephone numbers across a network to a directory application running on a Macintosh computer at the company's headquarters. When the telephone directory application receives the high-level event, it updates its directory with the new telephone numbers.

See the **Event Manager** for information on how to send and receive high-level events. See the **Apple Event Manager** for information on the Apple Event Interprocess Messaging Protocol.
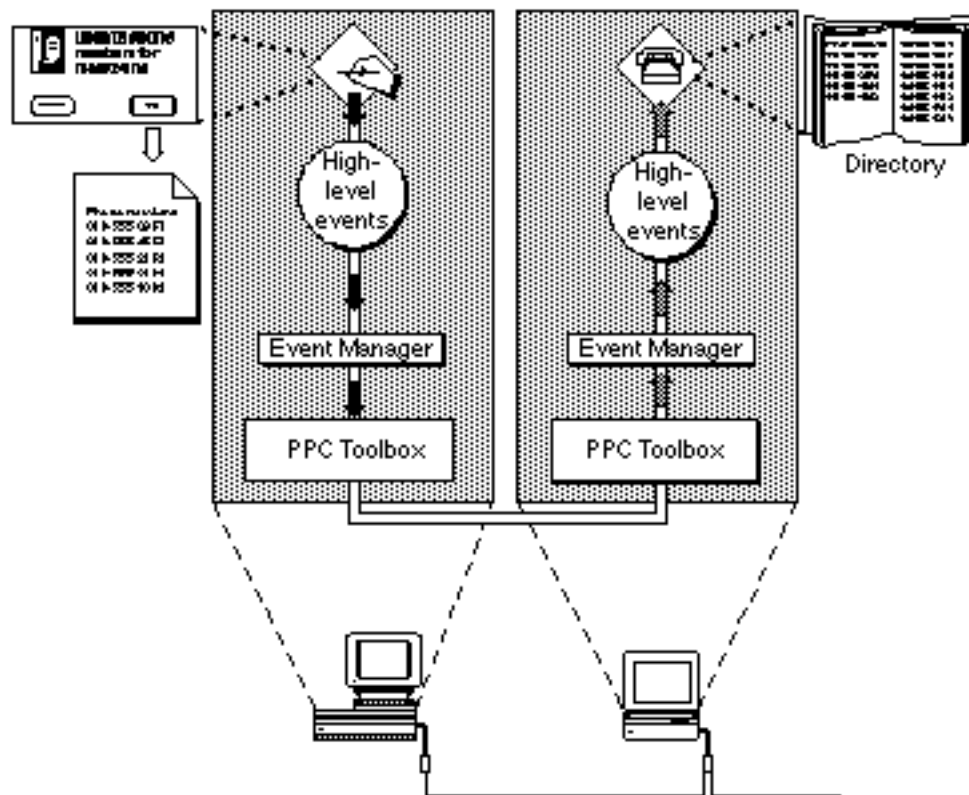
Sending events to other applications