Identifying Senders and Receivers

When you receive a high-level event, part of the information returned by **AcceptHighLevelEvent** is the sender of the event. You can use that information to respond selectively to requests made by other applications or to know which application to send any replies to. The information about the sender is provided in the form of a <u>TargetID</u> record

The <u>sessionID</u> field corresponds to the session reference number created by the <u>PPC Toolbox</u>. This is a 32-bit number that uniquely identifies a <u>PPC Toolbox</u> session (or connection) with another application. The name and <u>location</u> fields contain the sender's <u>port name</u> and <u>port location</u> (and have no meaning when posting an event). If the sending application is on the same machine as the receiving application, you can determine the sending application's <u>ProcessSerialNumber</u> by calling the function named <u>GetProcessSerialNumberFromPortName</u>.

When you post a high-level event, you can specify its recipient in one of four ways:

- by port name and port location (specified in a targetID record)
- by a sessionID
- by the application's creator signature
- by a <u>ProcessSerialNumber</u>

Note that to specify the recipient of a high-level event sent to an application across a network, you can use only its <u>targetID</u> or its <u>sessionID</u>. You can use any of the four ways when sending high-level events to applications on the local machine.

When you are replying to a high-level event, it is easy to identify the recipient because you can use the <u>targetID</u> record that you receive from <u>AcceptHighLevelEvent</u>, the <u>sessionID</u> contained in that <u>targetID</u> record, or the <u>ProcessSerialNumber</u> (if the receiving process is local). Note that replying by <u>sessionID</u> is always the fastest way to respond to a high-level event.

When you are not replying to a previous event, you need to determine the identity of the target application yourself. You can use one of several methods to do this. If the target application is on the local machine, you can search for that application's creator signature or its ProcessSerialNumber by calling the GetProcessInformation function.

If the application to which you want to send a high-level event is located on a remote machine, you need to identify it either by its <u>sessionID</u> or by its <u>targetID</u>. You can call the <u>PPCBrowser</u> function to let the user browse for a specific port. You can call the <u>IPCListPorts</u> function to obtain a list of all ports registered with the target <u>PPC Toolbox</u>.