Callback Functions

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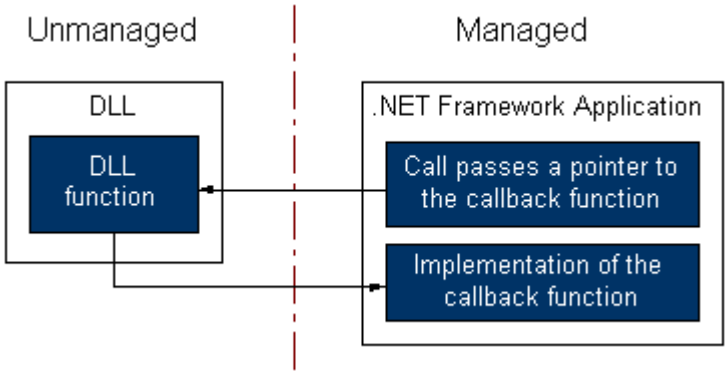
A callback function is code within a managed application that helps an unmanaged DLL function complete a task. Calls to a callback function pass indirectly from a managed application, through a DLL function, and back to the managed implementation. Some of the many DLL functions called with platform invoke require a callback function in managed code to run properly.

To call most DLL functions from managed code, you create a managed definition of the function and then call it. The process is straightforward.

Using a DLL function that requires a callback function has some additional steps. First, you must determine whether the function requires a callback by looking at the documentation for the function. Next, you have to create the callback function in your managed application. Finally, you call the DLL function, passing a pointer to the callback function as an argument.

The following illustration summarizes the callback function and implementation steps:



Callback functions are ideal for use in situations in which a task is performed repeatedly. Another common usage is with enumeration functions, such as **EnumFontFamilies**, **EnumPrinters**, and **EnumWindows** in the Windows API. The **EnumWindows** function enumerates through all existing windows on your computer, calling the callback function to perform a task on each window. For instructions and an example, see How to: Implement Callback Functions.

See also

- How to: Implement Callback Functions
- Calling a DLL Function

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