

# Custom navigation in dialog boxes, redux

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SuperBK asks, “What’s the proper way to add keyboard support to a dialog box?” There are many options available to you. The most traditional way is to pick them off in the dialog loop, either hard-coding the keys in code or putting them into resources by moving them to an accelerator resource. Moving them to an accelerator resource is a good idea if the keys are subject to translation (for example, if they are mnemonic). On the other hand, picking them off in code is your only choice if the action you want to take cannot be mapped to a `WM_COMMAND` message (or if you simply don’t feel like creating such a mapping). SuperBK appears to be using MFC, a framework I have only cursory familiarity with, so I’ll accept that the MFC way of customizing the dialog loop is to use `PreTranslateMessage`. One issue that was raised was the case where a keyboard accelerator is active only when a certain window has keyboard focus. But if that’s your design, then you don’t need to mess with the dialog loop at all. For example, the space bar pushes a button, but only if focus is on the button. There is no special code in the dialog loop to accomplish this; it’s just part of the button control’s `WM_KEYDOWN` message handler. This is one of those cases where you discovered a hammer and start seeing everything as a nail. When the user presses a key, the keyboard message is posted to the window that has keyboard focus. You don’t have to do any special work to pick it off, because it’ll get to that window anyway if you just leave it alone.

In SuperBK’s specific example, the list box should behave a certain way if it has focus and the user hits `VK_RETURN`. Okay, well, `VK_RETURN` is a special keyboard navigation key for dialog boxes, so you need to tell the dialog manager, “No, I want this key to go to me.” Just have the control return `DLGC_WANTMESSAGE` in response to `WM_GETDLGCODE` if the message is a press of the `VK_RETURN` key. The dialog manager will let the message go through to the window, and then the window can perform its custom `VK_RETURN` action.



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