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Advisor Answers

Rearranging memo field text

Visual FoxPro 6.0

Q: When you edit a memo field using MODIFY MEMO, you can drag and drop highlighted words anywhere in the window. However, if you display the memo field in an edit box on a form, you are allowed to highlight but you lose the ability to drag and drop. Are they any workarounds?

–Barry Heil (via Advisor.com)

A: As you note, you can't drag and drop text within an edit box. But in Visual FoxPro 6.0 and later, there is a solution. Use the OLE drag and drop capabilities added in VFP 6. For what you want, you don't even need any code. Just set OLEDragMode for the edit box to 1-Automatic and set OLEDropMode for the edit box to 1-Enabled. Then, when you highlight some text in the edit box and start dragging, it moves with the mouse and is dropped wherever you release the mouse in the edit box.

If you'd like to be able to drag text from the edit box into the other textual controls on your form, set their OLEDropMode properties to 1-Enabled. To enable dragging from those controls, set OLEDragMode to 1-Automatic.

With no code at all, you actually get even more. Try highlighting a few words, then dragging, but this time, hold down the CTRL key while you drag. Notice that the words you drag are copied rather than moved. That's a built-in feature of OLE drag and drop.

Of course, the OLE drag and drop features of VFP 6 allow you to do far more than that. Like VFP's native drag and drop features, they let you drag data among VFP's controls. But OLE drag and drop lets you go much farther. You can drag data between VFP controls and ActiveX controls and between VFP and other applications, as well. For example, you can drag text from a Word document into an edit box, and vice versa, just by setting the properties as mentioned above.

The model that Visual FoxPro uses for OLE drag and drop is the same as that used throughout Windows for drag and drop. It's extremely elegant, involving three objects in any drag and drop operation:

- the drag source - the object being dragged;
- the drop target - the object over which the drag source is being dragged;
- the data object – a special object that holds the data from the drag source in multiple formats.

Both the drag source and the drop target have events that fire at each step of the drag and drop process. For example, when the drag source is dragged over an object (a potential drop target), the drop target's OLEDragOver event fires, then the drag source's OLEGiveFeedback event fires. Similarly, when a drop occurs, the drop target's OLEDragDrop event fires, then the drag source's OLECompleteDrag event fires.

The data object has methods that let you manipulate the data it contains. You can find out what formats are available, retrieve the data in a particular format and create your own custom formats.

A complete discussion of OLE drag and drop model and what you can do with it would take more space than I have in this column. Suffice it to say that it's extremely powerful and flexible. That flexibility shows in your case where you can turn on just a couple of small features to get what you need.

–Tamar