

## Re: CListCtrl, hide and edit

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- *From:* "Bill Brehm" <don't want spam>
  - *Date:* Fri, 9 May 2008 08:34:44 +0800
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I was wondering if there is a way to display something other than text in a subitem. Two things come to mind.

1. Could I put a checkbox in as one of the items? I would like to use it to display a boolean value and also to allow that value to be edited.
2. Could I use one column to display the tree control type of + and - (and maybe lines) that I could click and expand groups of items. What i'm looking for is something like Excel's grouping capability, rather than a tree control next to a list control, as in File Explorer. If not, what do you think about putting a tree control next to or on top of a column of a list control?

Thanks,

Bill

"Tom Serface" <tom.nospam@xxxxxxxxxxxxxxx> wrote in message  
[news:EE4BFD17-0635-434D-BDE3-6AF0603E1E05@xxxxxxxxxxxxxxx](mailto:news:EE4BFD17-0635-434D-BDE3-6AF0603E1E05@xxxxxxxxxxxxxxx)

I typically sort the items in my memory list (the one the list control is calling on to get it's value line by line). Of course the memory list can be just about anything, but for me it's typically a vector of COBList of objects so sorting is usually based off of one of the items in the object. For example, I typically have a list of items that I just call a routine on like:

```
bool CDialogWithList::CompareAndSwapString1(int pos, bool bAscending)
{
    CMyObjectInfo *temp;
    int posFirst = pos;
    int posNext = pos + 1;

    if(!bAscending) {
        if (((CMyObjectInfo *)GetAt(posFirst))->m_csString1 <
            ((CMyObjectInfo *)GetAt(posNext))->m_csString1) {
            temp = (CMyObjectInfo *)GetAt(posFirst);
            SetAt(posFirst, GetAt(posNext));
            SetAt(posNext, temp);
            return TRUE;
        }
    }
}
```

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```
}
}
else if (((CMyObjectInfo *)GetAt(posFirst))->m_csString1 >
((CMyObjectInfo *)GetAt(posNext))->m_csString1) {
temp = (CMyObjectInfo *)GetAt(posFirst);
SetAt(posFirst, GetAt(posNext));
SetAt(posNext, temp);
return TRUE;
}
return FALSE;
}

bool CDataFileArray::CompareAndSwapDate(int pos, bool bAscending)
{
CMyObjectInfo *temp;
int posFirst = pos;
int posNext = pos + 1;
if(!bAscending) {
if (((CMyObjectInfo *)GetAt(posFirst))->m_cDate <
((CMyObjectInfo *)GetAt(posNext))->m_cDate) {
temp = (CMyObjectInfo *)GetAt(posFirst);
SetAt(posFirst, GetAt(posNext));
SetAt(posNext, temp);
return TRUE;
}
}
else if (((CMyObjectInfo *)GetAt(posFirst))->m_cDate >
((CMyObjectInfo *)GetAt(posNext))->m_cDate) {
temp = (CMyObjectInfo *)GetAt(posFirst);
SetAt(posFirst, GetAt(posNext));
SetAt(posNext, temp);
return TRUE;
}
return FALSE;
}
}
```

Then I call a routine to Sort the object list like:

```
void CMyDialogWithList::Sort(MY_DATA_SORT_ITEMS nSort, bool bAscending)
{
bool bNotDone = TRUE;
int pos = 0;

while (bNotDone) {
bNotDone = FALSE;
switch(nSort) {
case MY_DATA_SORT_NONE:
break;
case MY_DATA_SORT_STRING1:
for(pos = 0; pos < GetUpperBound(); pos++)
bNotDone |= CompareAndSwapString1(pos, bAscending);
}
}
```

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```
break;
case MY_DATA_SORT_STRING2:
for(pos = 0;pos < GetUpperBound();pos++)
bNotDone |= CompareAndSwapString2(pos, bAscending);
break;
case MY_DATA_SORT_DATE:
for(pos = 0;pos < GetUpperBound();pos++)
bNotDone |= CompareAndSwapDate(pos, bAscending);
break;
default:
break;
};
}
}
```

So I don't use the sort mechanism in the list control at all. When the column wants to sort I just sort the list then refresh the current screen and only the items on the screen are drawn. I also move it back to the top of the list when someone sorts one of the columns. I think is sort of expected behavior. This is may not be the most efficient method for doing sorting, but it works well and keeps the object list in an order that I can write out and read back in the same order as the user last sorted.

Also, you can edit sub-items, but you have create your own edit control or trick it into think it is columns 0. For example:

<http://www.codeguru.com/cpp/controls/listview/editingitemsandsubitem/article.php/c4175/>

It's not that difficult once you get it implemented.

Tom

"Joseph M. Newcomer" <newcomer@xxxxxxxxxxxx> wrote in message <news:clu14ti1a6i5oebn448d4719rpbga6gfs@xxxxxxxxxx>

See below..

program displays the first item in each location. I can use the  
item  
number  
instead to solve that and it looks correct. Sorting gives an  
ASSERT now  
but  
that depends on lParam too so it's not surprising. However,  
how do I  
solve  
that because I can't get at the item number in the compare  
function.

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Tom Serface is our virtual-CListCtrl guru, perhaps he can answer this. I've not used virtual controls because I typically have a small number of items to store, and there are only a few cases where I \*should\* have used one, but because it was not a "product deliverable" but a personal hobby project, I didn't bother.

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Also, how do I deal with the number of items in the list control? I could imagine I just set the size of the list to the total number of items I should be displaying. It should be fast to do that – the control just allocates or deallocates memory. Is that correct?

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For a virtual control, there is no allocation at all, which is why you get the performance.

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Lastly, is it possible to edit a list control subitem in place? If not, what is the purpose of EditLabel()? Oh wait. I set Edit Labels. Now I can get an in place edit of the first column. How can I do the other columns?

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Due to fundamental failures of design, a CListCtrl only allows the editing of the 0th element, making it nearly useless for anything that has sophisticated constraints (for example, I'd like the 0th element to be the index, but now I have to get into manipulating the column order to make the one-and-only-editable-field be the logical column 0 while displaying some other column in the leftmost position, a real pain). I think there are some articles in [www.codeproject.com](http://www.codeproject.com) on creating a CListCtrl subclass in which any column can be edited, and I would consider looking there first.

joe

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