Subject: Get the row numbers currently drawn
Posted by crydev on Thu, 09 May 2013 15:13:37 GMT
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Hello,

I was wondering. Is there a possibility to get the row numbers of the rows currently drawn? By that, I mean the rows that are visible to the user in the ArrayCtrl. If I need to derive a class from the ArrayCtrl in order to get them, that is fine. But I'm not sure where to look.

I think it is a good solution because my ArrayCtrl contains 1,000,000 rows, and I want a timer running to update the value of the rows currently in view, by ReadProcessMemory. It is too slow and expensive to update all million rows, so it would be much nicer if I could just update the rows that are visible!

Thanks in advance!

Subject: Re: Get the row numbers currently drawn
Posted by BioBytes on Thu, 09 May 2013 19:23:22 GMT
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Hi Crydev,

Did you try bool GrdCtrl::InView()?

Regards
Biobytes

Subject: Re: Get the row numbers currently drawn
Posted by crydev on Fri, 10 May 2013 18:59:10 GMT
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Hello BioBytes,

I am not able to, because I use the ArrayCtrl instead of the GridCtrl. I do not want to change because I like the SetVirtualCount feature. It made my UI very fast.

Thanks

Subject: Re: Get the row numbers currently drawn
Posted by BioBytes on Fri, 10 May 2013 19:55:57 GMT
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Hello CryDev,

Perhaps you could have a look the ArrayCtrl Embedded functions:

IsCursor
checks whether cursor is in the table (identical to GetCursor() >= 0)
GetCursor
returns current cursor row, -1 when none
GetCursorSc
returns the location of the cursor row within the table view area
ScCursor
scrolls the table to move the cursor row to given location within the table view
CenterCursor
scrolls the table to move cursor into the middle of the current view
ScrollInto
scrolls the table by minimum amount necessary to make given row visible
ScrollIntoCursor
scrolls the table by minimum amount necessary to make cursor row visible
GetScroll
returns current table scrollbar location
ScrollTo
sets table scrollbar location
Find
locates table row containing a given element
FindSetCursor
moves the cursor to table row containing a given element

Some functions allow to check if the row is visible or not.

Regards

Biobytes

Subject: Re: Get the row numbers currently drawn
Posted by Sender Ghost on Fri, 10 May 2013 21:04:30 GMT
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Hello, Crydev.
crydev wrote on Thu, 09 May 2013 17:13
I was wondering. Is there a possibility to get the row numbers of the rows currently drawn? By that, I mean the rows that are visible to the user in the ArrayCtrl.
After looking at ArrayCtrl::RefreshSel() method, I created following example to get visible range of rows:
Toggle Spoiler

```
#include <CtrlLib/CtrlLib.h>

using namespace Upp;
```

```
Tuple2<int, int> GetVisibleRange(const ArrayCtrl& array)
{
 int from, to;
 const int last = array.GetCount() - 1;

 if (last >= 0) {
  const int cy = array.GetSize().cy - 1,
   sb = array.GetScroll();

  from = array.GetLineAt(sb),
  to = array.GetLineY(last) <= cy ? last : array.GetLineAt(sb + cy);
 }
 if (last < 0 || IsNull(to) || from > to)
  from = to = -1;

 return MakeTuple(from, to);
}

class App : public TopWindow {
public:
 typedef App CLASSNAME;
 App();

 ArrayCtrl list;
 DropList dropCount;

 void OnGet();
 void OnSelect();
};

App::App()
{
 Title(t_("The visible range of rows for ArrayCtrl"));
 Sizeable().Zoomable();
 SetRect(Size(640, 480));

 list.AddRowNumColumn("Index").SetDisplay(StdCenterDisplay()).HeaderTab().SetAlign(ALIGN_
CENTER);
 const int count = 0x100000;
 list.SetVirtualCount(count);

 dropCount.AddButton().SetLabel(t_("Get")).Tip(t_("Get the visible range of
rows")).Left().WhenPush = THISBACK(OnGet);
 dropCount.SetDisplay(StdCenterDisplay()).WhenAction = THISBACK(OnSelect);
 dropCount.Add(0, t_("Empty"))
  .Add(10, 10)
  .Add(count, count)
```

```
  .SetIndex(2);

 Add(list.HSizePosZ(4, 4).VSizePosZ(4, 28));
 Add(dropCount.HCenterPosZ(100).BottomPosZ(4, 20));
}

void App::OnSelect()
{
 const int index = dropCount.GetIndex();
 if (index < 0)
  return;

 list.SetVirtualCount(dropCount.GetKey(index));
}

void App::OnGet()
{
 Tuple2<int, int> range = GetVisibleRange(list);

 PromptOK(range.b < 0 ?
  t_("The rows are not visible") :
  NFormat(t_("From %d to %d"), range.a, range.b));
/* // How to use the result:
 RDUMP(range);
 if (range.b >= 0)
  for (int i = range.a; i <= range.b; ++i)
   RLOG(i << ": " << list.Get(i, 0));
*/
}

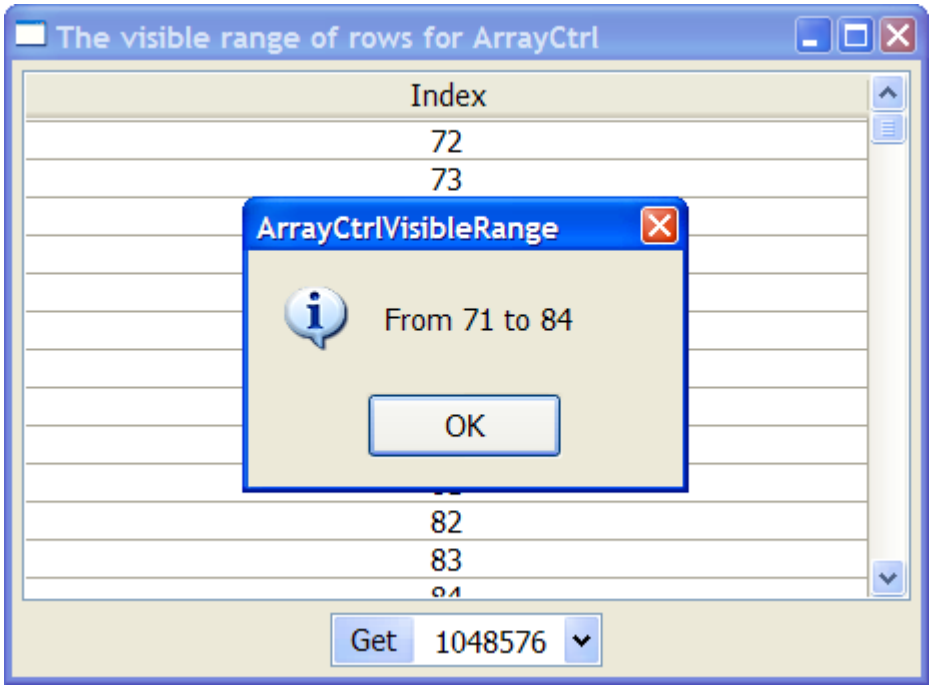
GUI_APP_MAIN
{
 Ctrl::GlobalBackPaint();

 App app;
 app.Run();
}
```

Edit: Added comment about how to use the GetVisibleRange function result.

File Attachments

1) ArrayCtrlVisibleRange.png, downloaded 1047 times



Subject: Re: Get the row numbers currently drawn
Posted by crydev on Mon, 14 Oct 2013 08:48:44 GMT
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Thanks Sender Ghost! My response is late because I forgot about this thread. Your solution works fine

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