Subject: Insert Button into GridCtrl Cell
Posted by jkastran on Thu, 09 Mar 2023 19:30:24 GMT
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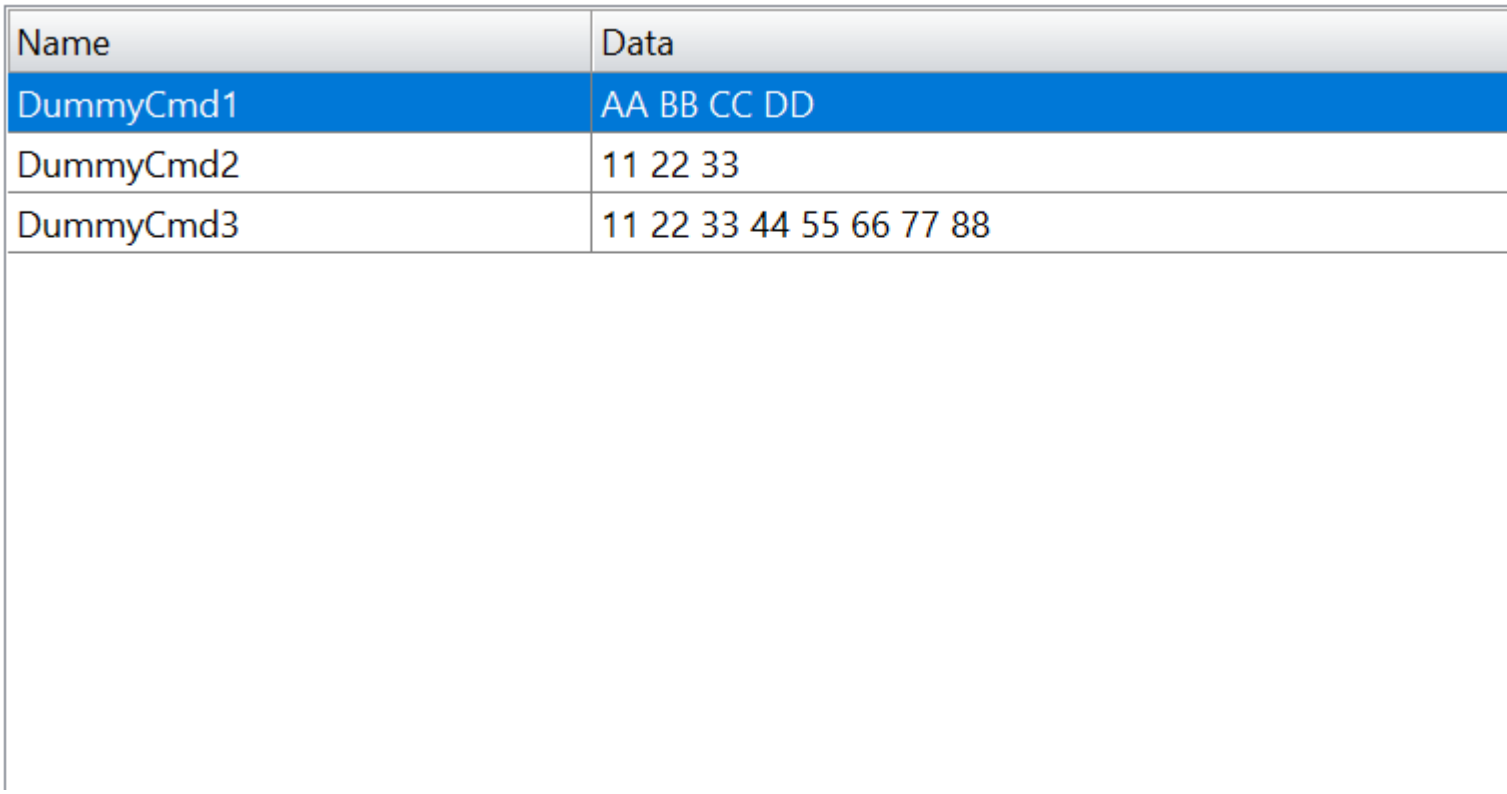
Hello,

I was wondering if it is possible to insert buttons into a GridCtrl

I have seen the option select example for ArrayCtrl, but I dont see anything for buttons, and I dont see any examples for inserting widgets into GridCtrl

File Attachments

1) Grid.PNG, downloaded 488 times



Name	Data
DummyCmd1	AA BB CC DD
DummyCmd2	11 22 33
DummyCmd3	11 22 33 44 55 66 77 88

Subject: Re: Insert Button into GridCtrl Cell
Posted by Oblivion on Thu, 09 Mar 2023 20:09:02 GMT
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Hi,

For ArrayCtrl, you can add buttons and other ctrls. In fact, you can add different ctrls for each row of a given column. All you need to do is use the factory methods and setup a callback:

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

using namespace Upp;

struct MyApp : TopWindow {
 ArrayCtrl list;

 MyApp()
 {
  Sizeable().Zoomable().CenterScreen().SetRect(0, 0, 1024, 800);
  Add(list.SizePos());
  auto sButtonFactory = [this] (int i, One<Ctrl>& c)
  {
   String s = list.Get(i, 0);
   c.Create<Button>()
    .SetLabel(s)
    .WhenAction = [s] { PromptOK("The value is " + s); };
  };

  list.AddColumn("texts");
  list.AddColumn("buttons").Ctrls(sButtonFactory);
  for(int i = 0; i < 100; i++)
   list.Add(AsString(100 - i), AsString(i));

 }
};

GUI_APP_MAIN
{
 MyApp().Run();
}
```

Same thing can be done with GridCtrl...

Best regards,
Oblivion

Subject: Re: Insert Button into GridCtrl Cell
Posted by cgokdemir on Thu, 09 Mar 2023 20:18:47 GMT
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Hi,

It's in the GridCtrlTest example, maybe you'd like to examine it.

```
void MakeEdit(One<Ctrl>& ctrl)
{
 ctrl.Create<EditInt>();
 ctrl->WantFocus();
}

//
grid.GetColumn(3).Ctrls(MakeEdit);
```

Kind regards

Subject: Re: Insert Button into GridCtrl Cell
Posted by jkastran on Thu, 09 Mar 2023 21:08:00 GMT
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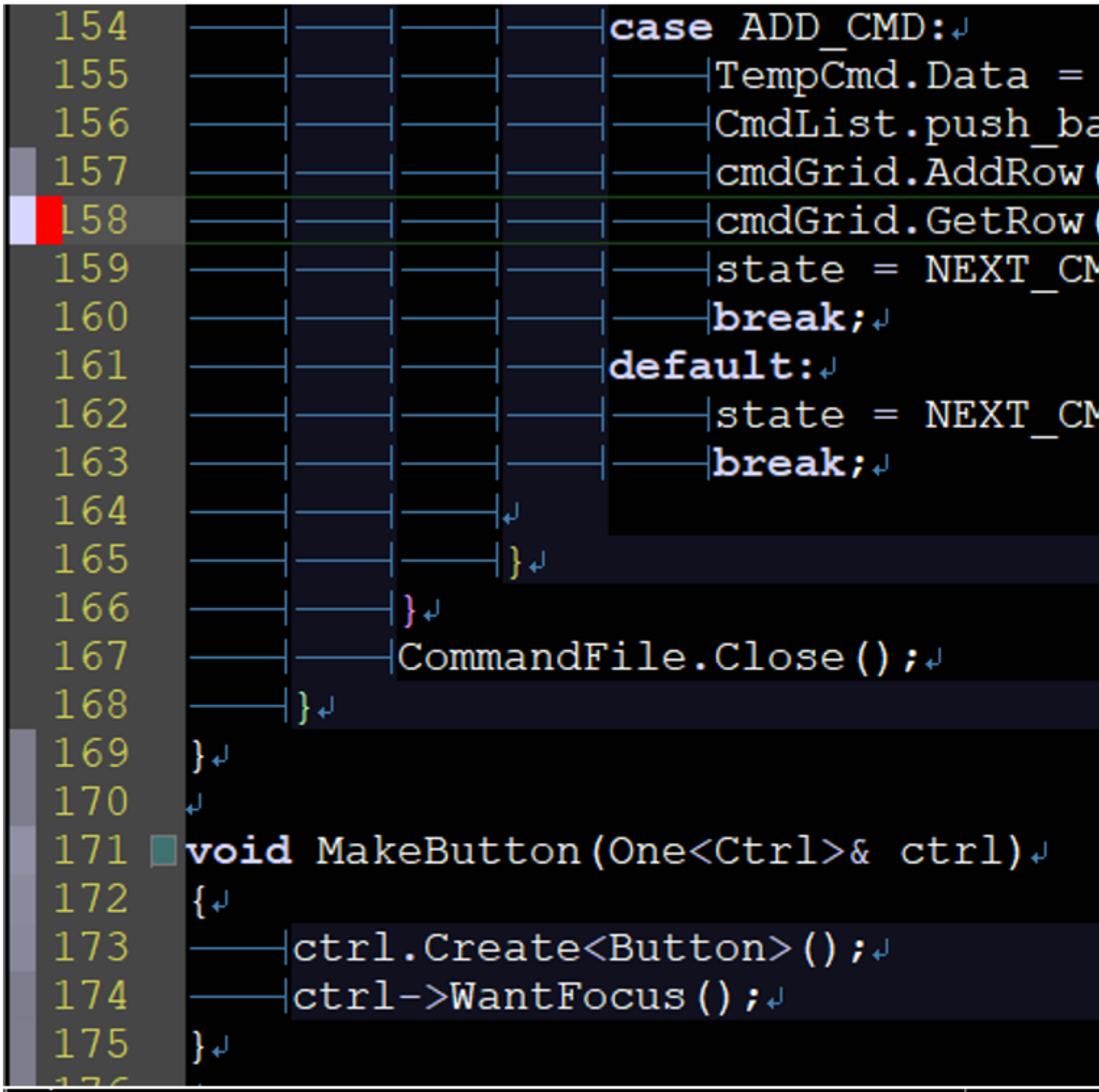
Hi, I tried this already but because of the errors and that it was in the ArrayCtrlTest File even though the demo is for GridCtrl, I thought that it is not for GridCtrl. Here is the code and the error I am getting

EDIT:
I moved the factory before where I call the creation of the column and it works.

Now the problem is there is no explanation on how to change label or add functionality to individual buttons with the "MakeButton" method

File Attachments

1) GridErr.PNG, downloaded 506 times



```
154                case ADD_CMD:
155                    TempCmd.Data =
156                    CmdList.push_ba
157                    cmdGrid.AddRow(
158                    cmdGrid.GetRow(
159                    state = NEXT_CM
160                    break;
161                default:
162                    state = NEXT_CM
163                    break;
164            
165            }
166        }
167        CommandFile.Close();
168    }
169}
170
171void MakeButton(One<Ctrl>& ctrl)
172{
173    ctrl.Create<Button>();
174    ctrl->WantFocus();
175}
```

CmdDock/**CmdDock.cpp**	158
GridCtrl/**GridCtrl.h**	772
GridCtrl/**GridCtrl.h**	773
GridCtrl/**GridCtrl.h**	774

Subject: Re: Insert Button into GridCtrl Cell
Posted by Oblivion on Thu, 09 Mar 2023 22:40:57 GMT
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Here's the thing: GridCtrl still uses pre-C++11 callbacks. (Deprecated API)
It should be updated to utilize the new Upp::Function variants and lambda functions with capture...

Good news is that you can achieve -mostly- the same results with the old api calls:

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

using namespace Upp;

void ButtonFactory1(One<Ctrl>& c, GridCtrl* list)
{
 static int i = 0;
 String s = list->Get(i++, 0);
 c.Create<Button>()
  .SetLabel(s)
  .WhenAction = [s] { PromptOK("The value is " + s); };
}

struct MyApp : TopWindow {
 GridCtrl  list;
 typedef MyApp CLASSNAME;
 MyApp()
 {
  Sizeable().Zoomable().CenterScreen().SetRect(0, 0, 1024, 800);
  Add(list.SizePos());
  list.AddColumn("texts");
  list.AddColumn("buttons_1").Ctrls(callback1(ButtonFactory1, &list));
  list.AddColumn("buttons_2").Ctrls(THISBACK(ButtonFactory2));
  for(int i = 0; i < 100; i++)
   list.Add(AsString(i), AsString(i));


 }

 void ButtonFactory2(One<Ctrl>& c)
 {
  static int i = 0;
  String s = list.Get(i++, 0);
  c.Create<Button>()
   .SetLabel(s)
   .WhenAction = [s] { PromptOK("The value is " + s); };
 }
```

```
};

GUI_APP_MAIN
{
 MyApp().Run();
}
```

Best regards,
Oblivion

Subject: Re: Insert Button into GridCtrl Cell
Posted by Oblivion on Thu, 09 Mar 2023 23:10:48 GMT
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Quote:Now the problem is there is no explanation on how to change label or add functionality to individual buttons with the "MakeButton" method

There are several ways, a simple one:

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

using namespace Upp;

struct MyButton : Button {
 Value val;
 MyButton() : Button()
 {
  WhenAction = [this]
  {
   PromptOK("The value of the button is " + AsString(val));
  };
 }
 void SetData(const Value& v) override
 {
  SetLabel(AsString(val = v));
 }

 Value GetData() const override
 {
  return val;
```

```
 }
};

struct MyApp : TopWindow {
 GridCtrl  list;
 MyApp()
 {
  Sizeable().Zoomable().CenterScreen().SetRect(0, 0, 1024, 800);
  Add(list.SizePos());
  list.AddColumn("texts");
  list.AddColumn("buttons").Ctrls<MyButton>();
  for(int i = 0; i < 100; i++)
   list.Add(AsString(i), i * 1000);


 }
};

GUI_APP_MAIN
{
 MyApp().Run();
}
```

Best regards,
Oblivion
