Subject: SetFocus with EditString as Node
Posted by iST1 on Sat, 05 Oct 2013 13:35:28 GMT
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This is simple edit node example (based on <a href="
http://www.ultimatepp.org/forum/index.php?t=msg&th=6380& amp;start=0&"
target="_blank">) with SetFocus problem when first "Add" button click:

```
class EditableTree : public TreeCtrl {
public:
 EditableTree() : selId_(-1) {
  editNode.SetCtrl(edit);
  OpenDeep(0, true);
 }

 void AddNode() {
  CloseEdit();

  int selId_ = Add(0);

     edit.SetData("Node" + AsString(selId_));
     edit.Show();
           edit.AutoSize();
  edit.SetFocus();//at first not select because IsOpen is false => why?

  SetNode(selId_, editNode);
 }

 void CloseEdit() {
  if (selId_ > 0) {
   SetNode(selId_, Node(~edit));
   edit.Hide();
  }
 }

private:
 int selId_;
    EditString edit;
    TreeCtrl::Node editNode;
};

GUI_APP_MAIN
{
 TopWindow wnd;
 Button btn;
 wnd.Add(btn.SetLabel("Add").LeftPos(10).TopPos(10));

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());
```

```
 btn <<= callback(&tree, &EditableTree::AddNode);
       wnd.Run();
}
```

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Mon, 07 Oct 2013 18:20:46 GMT
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iST1 wrote on Sat, 05 October 2013 09:35This is simple edit node example (based on <a href="
http://www.ultimatepp.org/forum/index.php?t=msg&th=6380& amp; amp;start=0&"
target="_blank">) with SetFocus problem when first "Add" button click:

```
class EditableTree : public TreeCtrl {
public:
 EditableTree() : selId_(-1) {
  editNode.SetCtrl(edit);
  OpenDeep(0, true);
 }

 void AddNode() {
  CloseEdit();

  int selId_ = Add(0);

     edit.SetData("Node" + AsString(selId_));
     edit.Show();
           edit.AutoSize();
  edit.SetFocus();//at first not select because IsOpen is false => why?

  SetNode(selId_, editNode);
 }

 void CloseEdit() {
  if (selId_ > 0) {
   SetNode(selId_, Node(~edit));
   edit.Hide();
  }
 }

private:
 int selId_;
    EditString edit;
    TreeCtrl::Node editNode;
};

GUI_APP_MAIN
```

```
{
 TopWindow wnd;
 Button btn;
 wnd.Add(btn.SetLabel("Add").LeftPos(10).TopPos(10));

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());

 btn <<= callback(&tree, &EditableTree::AddNode);
       wnd.Run();
}
```

Should be fixed, however you have to use SetFocus AFTER SetNode,
because only widget that is descendant of open window can have focus and until SetNode, edit is not assigned to any window. However, TreeCtrl still needed fixing to make it work...

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Mon, 21 Oct 2013 16:40:47 GMT
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Now i set cursor at the end of EditString, but how to set it under mouse (on left click)? It is exist GetMousePos(), but no analogue found in EditString.

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Tue, 22 Oct 2013 17:34:37 GMT
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iST1 wrote on Mon, 21 October 2013 12:40Now i set cursor at the end of EditString, but how to set it under mouse (on left click)? It is exist GetMousePos(), but no analogue found in EditString.

I am not quite sure what you mean by that...

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Wed, 23 Oct 2013 06:38:41 GMT
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I want to set EditString::SetSelection on mouse's position after left click (when we substituted a EditString instead Node).

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Wed, 23 Oct 2013 06:49:04 GMT

Well, last original issue fixed - I mean there was a bit of moving of items when going up/down, this now fixed.

As for your mouse problem, I am afraid it is not so easy to fix. The easier way I can see is to send the EditString 'syntetic' LeftDown event, based on current GetMousePos and EditString's GetScreenView (GetMousePos() - GetScreenView().TopLeft() is the mouse pos in widget's view - same coordinates as used for LeftDown).

Anyway, I think the much easier approach is not to try to wrangle with the original design of TreeCtrl and provide EditString for each Node (and not single one for the whole thing). Sure, EditString will eat something like 512 byte and makes all slower, so if you are going after a lot of data, your approach makes sense.

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Mon, 28 Oct 2013 16:58:32 GMT

I followed the advice to keep all EditString's in the tree nodes, but some error occur if WhenOpen used (select NODE1 -> add button click -> assertion failed)

```
class EditableTree : public TreeCtrl {
public:
 typedef EditableTree CLASSNAME;

 EditableTree() : selId_(0) {
  NoRoot().MultiSelect(true).HighlightCtrl(false);
  WhenSel = THISBACK(OnSelect);
  WhenOpen = THISBACK1(ChangeNodeImg, true);
 }

 int AddNode(int parent) {
  EditString &edit = edit_.Add();
     edit.SetData("NODE" + AsString(GetChildCount(0) + 1));
     edit.AutoSize();
  edit.SetFrame(NullFrame());

  Node node;
  node.SetCtrl(edit);
       return Add(parent, node);
 }

 void OnAddNode() {
  int id = AddNode(selId_);
```

```
  Open(selId_);
        SelectNode(id);
 }

 void SelectNode(int id) {
  ClearSelection();
  SelectOne(id);
  selId_ = GetSel()[0];
  ASSERT(selId_ == id);//failed
 }

 void OnSelect() {
  if (GetSelectCount() <= 0 || selId_ == GetSel()[0])
   return;

  selId_ = GetSel()[0];
 }

 void ChangeNodeImg(int selId, bool open) {
  if (!selId)
   return;

  Node node = GetNode(selId);
  //...some image assignment

  SetNode(selId, node);//if comment => no ASSERT(selId_ == id); failed
 }

private:
 int selId_;
    Array<EditString> edit_;
};

GUI_APP_MAIN
{
 TopWindow wnd;
 Button btn;
 wnd.Add(btn.SetLabel("Add").LeftPos(10).TopPos(10));

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());

 tree.AddNode(0);
 tree.AddNode(0);
 btn <<= callback(&tree, &EditableTree::OnAddNode);
    wnd.Run();
}
```

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Wed, 30 Oct 2013 08:46:37 GMT
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This is because if any slave widget has focus, this one and only this one widget is selected. In other words, with widgets, you cannot really use SelectOne (perhaps I should add an ASSERT there).

I guess your code might get fixed it you used SetFocus or ActiveFocus instead of SelectOne...

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Thu, 31 Oct 2013 14:06:14 GMT
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Mirek, can you fixed this code? I have no idea

```
class EditableTree : public TreeCtrl {
public:
 typedef EditableTree CLASSNAME;

 EditableTree() : selId_(0) {
  NoRoot().MultiSelect(true).HighlightCtrl(false);
  WhenSel = THISBACK(OnSelect);
 }

 int AddNode(int parent) {
  EditString &edit = edit_.Add(edit_.GetCount());
     edit.SetData("NODE" + AsString(GetChildCount(parent) + 1));
     edit.AutoSize();
  edit.SetFrame(NullFrame());

  Node node;
  node.SetCtrl(edit);
        return Add(parent, node);
 }

 void OnAddNode() {
  int id = AddNode(selId_);
  Open(selId_);
  edit_.Get(edit_.GetCount() - 1).SetFocus();
 }

 void OnSelect() {
  if (GetSelectCount() <= 0 || selId_ == GetSel()[0])
   return;
```

```
  selId_ = GetSel()[0];
 }

private:
 int selId_;
    ArrayMap<int, EditString> edit_;
};

GUI_APP_MAIN
{
 TopWindow wnd;
 Button btn;
 wnd.Add(btn.SetLabel("Add").LeftPos(10).TopPos(10));

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());

 tree.AddNode(0);
 tree.AddNode(0);
 btn <<= callback(&tree, &EditableTree::OnAddNode);
    wnd.Run();
}
```

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Sun, 03 Nov 2013 07:20:14 GMT
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It's all the exact same problem with the Ctrl::IsOpen

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Sun, 03 Nov 2013 09:05:43 GMT
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Yet another fix should be added:

```
GUI_APP_MAIN
{
 TreeCtrl tree;
 tree.MultiSelect(true);

 TopWindow wnd;
 wnd.Add(tree.SizePos());

 int id = tree.Add(0, TreeCtrl::Node("Node1"));
```

```
 tree.SelectOne(id, true);
 ASSERT(tree.GetSel()[0] == id);

 //tree.SelectOne(id, false);//if comment => removed node stay selected and ASSERTION in (*)
failed
 //tree.ClearSelection();//solution: ClearSelection must be added to the top of Remove method
 tree.Remove(id);

 tree.Add(0, TreeCtrl::Node("Node2"));

 id = tree.Add(0, TreeCtrl::Node("Node3"));
 tree.SelectOne(id, true);
 ASSERT(tree.GetSel()[0] == id);//(*)

 wnd.Run();
}
```

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Wed, 06 Nov 2013 15:36:44 GMT
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And some one trouble

```
class EditableTree : public TreeCtrl {
public:
 typedef EditableTree CLASSNAME;

 EditableTree() : selId_(0) {
  NoRoot().MultiSelect(true).HighlightCtrl(false);
  WhenSel = THISBACK(OnSelect);
 }

 bool Key(dword key, int count) {
  if (K_ENTER != key || selId_ <= 0) {
   return 1;
  }
  AddNode(0);
  Single<TopWindow>().Run();//=> ASSERTION: WindowProc invoked for class Upp::TopWindow
while in Paint routine
 }

 int AddNode(int parent) {
  EditString &edit = edit_.Add(edit_.GetCount());
     edit.SetData("NODE" + AsString(GetChildCount(parent) + 1));
     edit.AutoSize();
  edit.SetFrame(NullFrame());
```

```
  Node node;
  node.SetCtrl(edit);
        return Add(parent, node);
 }

 void OnSelect() {
  if (GetSelectCount() <= 0 || selId_ == GetSel()[0])
   return;

  selId_ = GetSel()[0];
 }

private:
    int selId_;
    ArrayMap<int, EditString> edit_;
};

GUI_APP_MAIN
{
 TopWindow wnd;

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());

 tree.AddNode(0);
 tree.AddNode(0);
        wnd.Run();
}
```

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Thu, 07 Nov 2013 09:33:09 GMT
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```
edit_.Get(edit_.GetCount() - 1)
```

is most likely wrong at the first sight...

You are retrieving Edit with key edit_.GetCount() - 1, which IMO is not what you wanted to do (see ArrayMap docs).

More coming...

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Thu, 07 Nov 2013 14:58:47 GMT
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I think this might do what you need:

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

using namespace Upp;

class EditableTree : public TreeCtrl {
 Array<EditString> edits;

public:
 typedef EditableTree CLASSNAME;

 EditableTree() {
  NoRoot().HighlightCtrl(false);
 }

 int AddNode(int parent_id) {
  EditString& edit = edits.Add();
  edit.AutoSize().SetFrame(NullFrame());
  static int i;
  edit <<= "NODE" + AsString(GetChildCount(parent_id) + 1);
  return Add(parent_id, Null, edit);
 }

 void OnAddNode() {
  if(!IsCursor())
   return;
  SetCursor(AddNode(GetCursor()));
 }
};

GUI_APP_MAIN
{
 TopWindow wnd;

 Button btn;
 wnd.Add(btn.SetLabel("Add").LeftPos(10).TopPos(10));
 Button btn2;
 wnd.Add(btn2.SetLabel("Show").LeftPos(100).TopPos(10));

 EditableTree tree;
 wnd.Add(tree.VSizePos(40).HSizePos());

 tree.AddNode(0);
```

```
 tree.AddNode(0);
 btn <<= callback(&tree, &EditableTree::OnAddNode);
   wnd.Run();
}
```

I apologize for delay - I had to fix some subtle focus issues in TreeCtrl for this particular mode of operation... (so you need latest sources for it to work correctly).

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Thu, 07 Nov 2013 17:38:39 GMT
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Thank you very much!
There is another moment: in my old code MultiSelect(true) is used to set cursor in the end of EditString:
 edit.SetSelection(AsString(~edit).GetCount());
 when node selecting (WhenSel callback). The example before whit MultiSelect(true) doesn't work correctly. It is easy to solve? PS: ideally when user clicked mouse selId_ value must be set, whereupon we can do everything whit appropriate node.

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Fri, 08 Nov 2013 06:58:53 GMT
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iST1 wrote on Thu, 07 November 2013 12:38Thank you very much!
There is another moment: in my old code MultiSelect(true) is used to set cursor in the end of EditString:
 edit.SetSelection(AsString(~edit).GetCount());
 when node selecting (WhenSel callback). The example before whit MultiSelect(true) doesn't work correctly. It is easy to solve? PS: ideally when user clicked mouse selId_ value must be set, whereupon we can do everything whit appropriate node.

MultiSelect is option that makes possible to select more than one node (Ctrl+Mouse). It is inherently incompatible with your case.

WhenSel is called always when selection changes, that includes normal cursor moves too. Also, no need to store selID_ separately, GetCursor should be valid always.

What do your really need to achieve?

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Fri, 08 Nov 2013 10:14:27 GMT
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For example, if you select a node I need to change the font, so is need to catch the appropriate event.

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Fri, 08 Nov 2013 10:26:07 GMT
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iST1 wrote on Fri, 08 November 2013 05:14For example, if you select a node I need to change the font, so is need to catch the appropriate event.

And what is stopping you?

Mirek

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Fri, 08 Nov 2013 10:40:17 GMT
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WhenSel when Multiselect is false not work in your example

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Fri, 08 Nov 2013 16:46:39 GMT
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UDP: small fixes to illustrate trouble

```
 class EditableTree : public TreeCtrl {
 Array<EditString> edits;

public:
 typedef EditableTree CLASSNAME;

 EditableTree() : selId_(0) {
  NoRoot().HighlightCtrl(false);
  WhenSel = THISBACK(OnSelect);
 }

 void OnSelect() {
  selId_ = GetCursor();//not called
             //..some node view preparing
```

```
}

int AddNode(int parent_id) {
 EditString& edit = edits.Add();
 edit.AutoSize().SetFrame(NullFrame());

 edit <<= "NODE" + AsString(GetChildCount(parent_id) + 1);
 return Add(parent_id, Null, edit);
}

void OnAddNode() {
 if (!IsCursor())
  return;

 SetCursor(AddNode(selId_));
}

private:
 int selId_;
};
```

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Sun, 10 Nov 2013 06:24:25 GMT
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The example before updated

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Mon, 11 Nov 2013 08:34:07 GMT
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The problem is still

Subject: Re: SetFocus with EditString as Node
Posted by mirek on Mon, 11 Nov 2013 14:46:53 GMT
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Hopefully fixed (in TreeCtrl).

Subject: Re: SetFocus with EditString as Node
Posted by iST1 on Mon, 11 Nov 2013 18:16:40 GMT
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Works without error! Thank you very much, it was very important for my project.
