
Subject: Getting the width of a layout?

Posted by [ptkacz](#) on Sun, 26 Mar 2017 04:48:37 GMT

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There appears to be some U++ magic going on, in how one goes from creating a layout and accessing it programatically.

If one creates a layout, let's say called, "ButtonLayout", one is able to then reference it as "WithButtonLayout". One can then define an object as follows:

```
WithButtonLayout<ParentCtrl> buttonPanel;
```

Button panel now allows us to work with the layout. How does one acquire the width or dimensions of the layout (i.e. buttonPanel)?

My other question, is how does "WithButtonLayout" come to be?

Peter

Subject: Re: Getting the width of a layout?

Posted by [cbpporter](#) on Wed, 29 Mar 2017 07:33:06 GMT

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When you see:

```
WithButtonLayout<ParentCtrl> buttonPanel;
```

Read instead:

```
ParentCtrl buttonPanel;
```

ParentCtrl is still the class of buttonPanel. Adding WithButtonLayout does not change the base class of your item. All it does is add a new set of fields and the CtrlLayout method so that you can apply the layout you designed to it.

So you can use the standard methods to get position and sizes.

The online documentation here is kind of lacking:

[http://www.ultimatepp.org/srcdoc\\$CtrlCore\\$LogPos\\$en-us.html](http://www.ultimatepp.org/srcdoc$CtrlCore$LogPos$en-us.html)

But you can read the documentation for these functions from Ctrl:

```
Ctrl&    LeftPos(int a, int size = STDSIZE);
Ctrl&    RightPos(int a, int size = STDSIZE);
Ctrl&    TopPos(int a, int size = STDSIZE);
Ctrl&    BottomPos(int a, int size = STDSIZE);
Ctrl&    HSizePos(int a = 0, int b = 0);
Ctrl&    VSizePos(int a = 0, int b = 0);
```

```
Ctrl&    SizePos();
Ctrl&    HCenterPos(int size = STDSIZE, int delta = 0);
Ctrl&    VCenterPos(int size = STDSIZE, int delta = 0);

Ctrl&    LeftPosZ(int a, int size = STDSIZE);
Ctrl&    RightPosZ(int a, int size = STDSIZE);
Ctrl&    TopPosZ(int a, int size = STDSIZE);
Ctrl&    BottomPosZ(int a, int size = STDSIZE);
Ctrl&    HSizePosZ(int a = 0, int b = 0);
Ctrl&    VSizePosZ(int a = 0, int b = 0);
Ctrl&    HCenterPosZ(int size = STDSIZE, int delta = 0);
Ctrl&    VCenterPosZ(int size = STDSIZE, int delta = 0);

Rect     GetRect() const;
Rect     GetScreenRect() const;

Rect     GetView() const;
Rect     GetScreenView() const;
Size     GetSize() const;
```

So GetRect should allow you to determine the size of your layout.

Subject: Re: Getting the width of a layout?
Posted by [ptkacz](#) on Sat, 01 Apr 2017 22:32:02 GMT
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Wow, cbpporter, thanks.

I'll look at your list and available documentation.

I did come across in the forums that revealed how to get the width, something like the following:

```
Size sz = buttonPanel.GetSize();

int width = sz.cx;
```

Kind of strange that there doesn't appear to be any getWidth(), or width() methods, but one can specify "cx". Kind of reminds me of a complex mathematical variable.

Peter

Subject: Re: Getting the width of a layout?
Posted by [rafiwui](#) on Mon, 10 Jul 2017 07:57:22 GMT
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I thought this would fit here:

I was wondering what size GetSize() is returning? Is it the zoomed size or do I have to call Zx/Zy in front of GetSize().cx/cy to get a size I can work with?
