
Subject: The Mysterious checkbox

Posted by [steveo](#) on Sun, 22 Nov 2020 02:26:49 GMT

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To me a check box is a box that holds one of 2 states, either checked or not checked. It is useful to be able to respond to changes in check box state. I have spent the last hour looking over the 100 or so methods which seem to be associated with the check box and for the life of me I can't figure out how to call a method on that control which will tell me the state "checked or not checked".

Any ideas?

Subject: Re: The Mysterious checkbox

Posted by [Oblivion](#) on Sun, 22 Nov 2020 08:07:43 GMT

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Hello steveo,

Quote:To me a check box is a box that holds one of 2 states, either checked or not checked. It is useful to be able to respond to changes in check box state. I have spent the last hour looking over the 100 or so methods which seem to be associated with the check box and for the life of me I can't figure out how to call a method on that control which will tell me the state "checked or not checked".

Any ideas?

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

```
using namespace Upp;
```

```
struct MyAppWindow : TopWindow {
    Option option;
    MyAppWindow()
    {
        Sizeable().Zoomable().CenterScreen().SetRect(0,0, 640, 480);
        Add(option.SetLabel("Option").LeftPosZ(20).TopPosZ(20));
        option << [=] { Title(Format("Option (checkbox) state: %", ~option)); };

        // OR,
        // option.WhenAction = [=] { Title(Format("Option (checkbox) state: %", ~option)); };
    };
};
```

```
GUI_APP_MAIN
{
```

```
MyAppWindow().Run();  
}
```

Almost all trivial ctrls (widgets) follow the same pattern. If they contain a Value you can access it via a tilde (~) operator,
Or via GetData and SetData methods. And they define a WhenAction callback which can be also set by an overloaded operator.

I suggest you check the Ctrl design concepts document:

[https://www.ultimatepp.org/srcdoc\\$CtrlCore\\$CtrlDesignConcepts_en-us.html](https://www.ultimatepp.org/srcdoc$CtrlCore$CtrlDesignConcepts_en-us.html)

Best regards,
Oblivion

Subject: Re: The Mysterious checkbox
Posted by [Klugier](#) on Mon, 23 Nov 2020 22:21:19 GMT
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Hello Stevo and Oblivion,

I added exemplary usage to our Option documentation. I hope it will help, also thanks Stevo for the question. It is valuable information that the description might be misleading for new users and API is not so easy to use.

I would like to also proposed some improvements to Option API to be more verbose - should be much more easier to understand:

```
bool IsChecked();    // value == 1  
bool IsUnchecked()  // value == 0  
bool IsIndeterminate(); // value == Null
```

I am probably more liberal than Mirek and I would like to see more alternatives to operator overload.

Klugier

Subject: Re: The Mysterious checkbox
Posted by [omari](#) on Tue, 24 Nov 2020 09:35:52 GMT

also, you can use it the easy way. think of int operator() that return : 1 if checked, 0 if not.

Option a;

```
....  
a = 1; // set checked  
a = 0; // set unchecked  
a = true; // set checked  
a = false; // set unchecked  
a = !a; // change checked  
....  
if(a) // checked  
{  
  ...  
}
```