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Subject: Know what you're using. Size of some common types.

Posted by [Lance](#) on Mon, 27 Dec 2021 18:33:50 GMT

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Test result

Now I have redone the test in Release mode, the result is not as eye-catching.

Event<> is of the same size as void \*, this is better than I had expected. Of course actual memory used might be more than that: a thisfn with the sizeof of member function pointer and an object pointer for this will have difficulty to fit in the room for a void \*.

Using 64 bit for context. I would think a ScrollBar is too big for the job it does. Ideally it should be done without containing 4 Buttons or Button should somehow be compacted to use significantly less room and leave some functions to derived class or optionally (pay per use) memory allocated from heap.

Anyway, the result is quite satisfying and reassuring.

BTW, test program: `#include <CtrlLib/CtrlLib.h>`

`#include <GridCtrl/GridCtrl.h>`

`#include <TabBar/TabBar.h>`

`using namespace Upp;`

`#define SZ(t) "\n" #t "\t" << sizeof(t) /* << "\t" << alignof(t) */`

`GUI_APP_MAIN`

```
{
String s;
s << SZ(void *)
  << SZ(Value)
  << SZ(String)
  << SZ(Event<>)
  << SZ(Vector<int>)
  << SZ(Button)
  << SZ(TextField)
  << SZ(ScrollBar)
  << SZ(TabBarCtrl)
  << SZ(ArrayCtrl)
  << SZ(GridCtrl);
RLOG(s);
}
```

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## File Attachments

1) [a.png](#), downloaded 692 times

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