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Subject: Re: A problem with UPP application scale . . . UPP exonerated, the rest of the story

Posted by [jlfranks](#) on Tue, 24 Feb 2009 23:26:05 GMT

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Well, there is more to the story.

Mis-diagnosis of the problem for a start

True enough, the is-a relationship with inheritance will cause a UI class file at the bottom of the hierarchy to re-compile everything in that line all the way to the top, maybe four or five levels deep. Still not too bad because not all that many files are involved in a re-compile.

The top-level UI class was providing utility for lower level classes, such as special callbacks, update of status bar, etc. So, each lower level file that needed access to those interfaces included the top-level .h file (the one that inherits from top-window). That was the cause of the real problem because now any change anywhere in the hierarchy causes a re-compilation of any UI class that included the top-level .h, which was nearly all of them.

The solution was to create a pure abstract base class that provided the interface. However, it wasn't so pure because the callbacks (static in nature) had to be put there also. Now the top level UI also inherits from this interface and implements the virtual methods that were pure abstract in the base class. A provision was included for getting access to the pointer to the base class, which all lower level UI classes can get.

Compile time is now good. UPP was not the problem, but did gives us the rope to hang ourselves, which we promptly did.

Everything is going well now. Thank you for your suggestions. I'm going to look at those closely. Those will just make things that much better. We are over the hump now.

--jlf

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