
Subject: Re: Saving an application state

Posted by [David Fanning](#) on Mon, 21 Jun 2004 15:16:40 GMT

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Rob Dimeo writes:

> We have had a number of requests from our software users to be able to
> save the "state" of the GUI application prior to closing it so that
> users can restore it at a later time. The GUI applications are
> typically written as object widgets that can contain many other
> objects. The relationship with the the GUI and other objects can be
> has-a and is-a. I know that there are certain tricks related to
> saving objects and restoring them (as discussed on this NG) but I
> don't have that much experience doing this myself. I am probably
> asking too much but....is there a straightforward way to modify
> existing object widgets that allows the user to save and restore the
> widget state?

I wish. :-(

I think the short answer is iTools.

What RSI has done in iTools is decouple the GUI representation of the object from the object itself. This is a fantastic idea. It means you can easily store the state of an object application and restore it later without having to think about widget identifiers. Of course, the price of this feature is an enormous increase in complexity, which I think makes iTools so complicated no one outside of RSI can use it. (Which, I have been thinking lately, must really be the Plan. :-)

In simple object widget applications, it is easy enough to simply divorce the graphical part of the object from the rest of the program (probably via a GUI method that simply builds the graphical user interface). "Saving" the state then simply becomes saving everything *except* the GUI.

I find, though, that it works better in theory than it does in practice. In practice, at least using the widget objects I use daily, objects are so intertwined that saving an object often means creating save files 12-15 MBytes in size! Mostly because IDL is doing the right thing and saving the *connections* between objects as well as the objects themselves. It's just that that's not what I want! Well, it's what I want. I just don't want it right now. :-)

I've thought about this a lot (and JD has written about his method for doing this several times in this newsgroup).

I think I actually have a method for doing this in my Catalyst Library that would work with a LOT less complexity than the iTools model. But, unfortunately, it would involve some rather major modifications that I have not found time to implement yet.

In the meantime, I think the alternatives are to invest a couple of years learning iTools, or just muddle our way through using what we already know. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: Saving an application state
Posted by [Paul Sorenson](#) on Mon, 21 Jun 2004 19:34:25 GMT
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Hi, Rob.

I modified XOBJVIEW to do this. You can see how I did it in code and notes given (via links) in <http://www.paulsorenson.com/underthehood.html> . See...

METHOD: PCSexObjViewWid::ReCreateWidgets .

Dick Jackson gave me lots of suggestions and examples for that part.

Hmmm. Should that method name be spelled "Re-CreateWidgets", with a hyphen? What would my English teachers say :-0

-Paul Sorenson
www.paulsorenson.com

"Rob Dimeo" <robert.dimeo@nist.gov> wrote in message <news:cb539436.0406210649.5d2ecf19@posting.google.com>...

> Hi,

>

> We have had a number of requests from our software users to be able to
> save the "state" of the GUI application prior to closing it so that
> users can restore it at a later time. The GUI applications are
> typically written as object widgets that can contain many other
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>
> Many thanks in advance,
>
> Rob

Subject: Re: Saving an application state
Posted by [Mark Hadfield](#) on Mon, 21 Jun 2004 21:51:01 GMT
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Paul Sorenson wrote:

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> What would my English teachers say :-0
>

I think you should worry more about what IDL would say. Unless you're going to get your English teacher to compile your code!

--

Mark Hadfield "Ka puwaha te tai nei, Hoesa tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: Saving an application state
Posted by [Paul Sorenson](#) on Tue, 22 Jun 2004 00:55:49 GMT
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D'oh! IDL would say "% Syntax error"! Thus my widget objects are destined to punch out on the ol' time clock and "party on down" every time I want to re-create them :-)

-Paul Sorenson
www.paulsorenson.com

"Mark Hadfield" <m.hadfield@niwa.co.nz> wrote in message
news:cb7l84\$2g3\$1@newsreader.mailgate.org...

> Paul Sorenson wrote:
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> --

> Mark Hadfield "Ka puwaha te tai nei, Hoesa tatou"

> m.hadfield@niwa.co.nz

> National Institute for Water and Atmospheric Research (NIWA)
