
Subject: Re: modifying itools (ivolume)

Posted by [David Fanning](#) on Sun, 23 Nov 2003 22:11:27 GMT

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Erica Stanley writes:

> Can anybody provide any insight into modifying itools or creating your
> own itool applications? In particular, I would like to modify ivolume
> to not only render the desired volume but also render icons(in my
> case, IDLgrPolygon objects) within the volume at specified positions.
> I've been reading through the itools documentation, but I'm not
> understanding how to go from the examples in the documentation to
> building my own itool application or even adding functionality to
> ivolume. Any tips/suggestions would be greatly appreciated.

I'm not the best IDL programmer in the world. But I'm far from the worst. I certainly know my way around IDL object programs, and I can use object graphics on those rare occasions when I have a need for them. In short, I'm reasonably confident writing IDL programs.

But iTools completely and utterly mystifies me. I spent three solid weeks trying to write my own iTool. I read the iTool documentation set cover to cover twice. I didn't have the first clue. I didn't come *close* to writing an iTool. Finally, I just said the hell with it. I didn't see why I would want to be using the darn things anyway. The programs I write are almost always as nice as iTools and they can be readily understood by my customers. They do a particular job in a particular situation. They are not be-all-and-end-all tools. I like it like that. My customers like it like that. I don't see much reason to change, to tell you the truth.

I don't know, as I've said before in this newsgroup, who these tools are written for. I spend a lot of time with IDL users. I don't think there is one in a hundred who is going to be able to figure out how to write an iTool from the documentation and examples in the IDL 6.0 release. If you manage it, I'd love to hear about it. I'll give you a prominent place on my web page to explain how you did it.

Cheers,

David

P.S. Let's just say I know people who *ought* to know something about iTools who are nearly as confused about them as I am. :-)

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: modifying itools (ivolume)
Posted by [Rick Towler](#) on Mon, 24 Nov 2003 20:28:39 GMT
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"David Fanning" wrote in message...

O.K. David, I will finally bite.

> I don't know, as I've said before in this newsgroup,
> who these tools are written for.

Do you remember when you started using IDL? I don't know how it was sold to you, but I remember being sold by the visualization capabilities. "You can plot your data with one simple command!" And 15 other calls to add a legend and colorbar and text that you then had to twiddle with for 20 minutes to get just right... But it still was an impressive tool and compared to the competition it was (IMO) superior.

Obviously you aren't hanging around the University of Colorado campus too much these days. At the UW, a war is being waged by software companies for the hearts and minds of students. Insightful, Mathworks, RSI, Wolfram, Microsoft, SAS, ESRI... The battle to grow the user base is here. And today, when I try to sell a new student on IDL, it isn't so simple:

Rick> O.K., you read in some data, you have your PLOT there,
now add a few XYOUTS... there! Now hit F5.

Student> Cool! But that title needs to be moved a bit,
and the legend... I'll just use my mouse...

Student> What is wrong, the title isn't moving.

Rick> Go back to your program. Change this to 0.63 and
that to 0.925. Compile. Run.

Student> Well that is a bit better... But what about that...
And why can't I use the mouse?

Haje> Why does the text look like crap?

Student> And why are the colors all funny?

Student> Why is it all screwed up when I print it?
Student> Forget this. I am going to use <insert easier
to use application name here>

There are a number of applications that do basic scientific viz
easier/quicker than IDL. IDL is still a very powerful visualization package
but most of it is out of reach for the new/casual IDL user. The same user
RSI is trying to recruit to it's army of loyalists.

Enter iTools.

So while I can't answer your question from RSI's perspective, I see the
iTools specifically targeted at the new or casual IDL user. Give them a
reason to keep using IDL and investing time in learning the language. As
that investment grows, so does RSI's revenue.

I also think it is too early to debate whether or not the iTools will
ultimately deliver on this goal. I am cautiously optimistic, but that is
just my personality :)

So bash iTools if you must, but make sure you view them from a few different
angles before you let loose.

-Rick

Subject: Re: modifying itools (ivolume)
Posted by [Craig Markwardt](#) on Mon, 24 Nov 2003 20:55:29 GMT
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"Rick Towler" <rtowler@u.washington.edu> writes:

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I agree that iTools looks very nice from the Excel-type user's
perspective.

But it seems that iTools are (close to) impossible to script, and
therefore they will be useless for many applications. This means that
direct graphics are still useful, and should be supported.

Craig

--

Subject: Re: modifying itools (ivolume)

Posted by [David Fanning](#) on Mon, 24 Nov 2003 21:03:01 GMT

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Rick Towler writes:

> So bash iTools if you must, but make sure you view them from a few different
> angles before you let loose.

Oh, I didn't let loose. What you saw was the fourth draft of the article, after uncharacteristically long pauses to see if this was really what I wanted to say. :-)

I think you are right. I think RSI must be after the casual IDL user. But what a shock it must be for the casual user who gets hooked on IDL to discover that if he wants to make a modest change in the way his tool works that he is looking forward to 8-12 months of graduate-school level effort to make the change. Maybe my estimate was low. Maybe one in a thousand is going to be so hooked they are going to make the effort.

Heck, I'm hooked, and I'm not going to do it unless there are a lot more compelling reasons than I find right now.

You are also right that this is the first draft of iTools. Widgets weren't all that compelling in IDL 3.0 either, especially when you could do *everything* from the command line anyway. :-)

I guess time will tell. I've had lots of practice admitting I was wrong. I could probably do it again if the evidence was convincing.

Cheers,

David

--

David W. Fanning, Ph.D.
Fanning Software Consulting, Inc.

Subject: Re: modifying itools (ivolume)
Posted by [Haje Korth](#) on Mon, 24 Nov 2003 21:38:44 GMT
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Rick,
what a great piece of humor to end the work day. I was basically ROFLOL. But in the end it does not matter how crappy your fonts are and how poorly the title is centered. All people care for is how cool the science is! Besides that, the programmers at Adobe want to live, too.
Regarding the recruitment of "hooked" students, I would handle that completely different: I would give out FREE student versions, because there is no money in students anyway (they can't even buy their own music). But as you noticed, getting the students hooked is THE way to go. If it is not FREE, students obtain software in not so legitimate ways. In this scenario software companies with the best copy protection (dongle/flexlm) loose out.

Cheers,
Haje

"Rick Towler" <rtowler@u.washington.edu> wrote in message
[news:bptppu\\$dom\\$1@nntp6.u.washington.edu](mailto:news:bptppudom1@nntp6.u.washington.edu)...

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