
Subject: Re: Interactive Debugging Tools
Posted by [dosfun](#) on Fri, 03 Jul 2009 23:45:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

> Folks,
>
> I've been debugging a program this week that uses a large
> image cube. I peel one image after the other off the cube
> because I can't load the whole cube into memory at once.
>
> But that's neither here nor there. The point is,
> there is a problem with some of the image data and
> I've been trying to track it down. I have some very
> nice tools for interactively looking at images and
> their values at specific locations (I am thinking
> in particular of ImgWin.) The problem is, I can't use
> ImgWin to look at my image data when I am stopped
> inside my program, because as a widget program, ImgWin
> needs access to the command interpreter at the main
> IDL level. A dilemma, as they say.
>
> If I could only get my image data back to the IDL
> main IDL command level where I could look at it.
> Well, now I can. I wrote a new Coyote Library program
> this morning, named SaveToMain. I can use it to export
> any IDL variable from within any IDL procedure or function
> back to the main IDL level:
>
> IDL> SaveToMain, thisImage
>
> If I call the program as above, the variable is
> exported to the main level with the same name as it
> has in the local procedure or function. If I wish
> to give it a new name, I just do this:
>
> IDL> SaveToMain, thisImage, 'problemImage'
>
> This allows me to be in my stopped code somewhere. Find a
> variable I want to look at, export it back to the main level
> of IDL, type RETALL to return to the main IDL level, and
> use my interactive widget tools to further investigate the
> variable. I just find this extremely useful. Maybe you
> will, too.
>
> <http://www.dfanning.com/programs/savetomain.pro>
>
> Cheers,

>
> David
> --
> David Fanning, Ph.D.
> Coyote's Guide to IDL Programming (www.dfanning.com)
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Very useful tool, make debugging easier and more interesting.
