Subject: Re: does IDL support multi threading Posted by David Fanning on Wed, 12 Jun 2002 14:14:39 GMT

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Ashwin (Ashwin.Krishnakumar@philips.com) writes:

- > I have a GUI written using IDL . When a procedure is executing i am not able
- > to select/click any button on GUI.i.e the GUI is completely inactive and
- > does not respond to the user inputs untill the procedure is completed. How
- > to make the GUI have a higher priority than other procedures.

Ain't a gonna happen. Sorry. :-(

Cheers.

David

--

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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: does IDL support multi threading Posted by muswick on Sat, 15 Jun 2002 13:45:52 GMT View Forum Message <> Reply to Message

"Ashwin" <Ashwin.Krishnakumar@philips.com> wrote in message news:<3d073a06\$0\$229\$4d4ebb8e@read-nat.news.nl.uu.net>...

- > I have a GUI written using IDL . When a procedure is executing i am not able
- > to select/click any button on GUI.i.e the GUI is completely inactive and
- > does not respond to the user inputs untill the procedure is completed. How
- > to make the GUI have a higher priority than other procedures.

IDL does not support true multithreading, but there are a few tricks.

Here are two solutions you can try (there are others, but it gets more complicated.)

First, If the procedure you are executing is working on data that the GUI doesn't need access to, e.g. you have a large volume of data and you want perform a series of operations, like a radon transform reconstruction and save the results to a file for later display, then you could save your data, write the procedures to a batch or script file, then spawn off a second IDL session with /nowait to do the work. Have the script create a done.dat file when it is done. (if you running Unix you can use a pipe to communicate) Have your GUI check

periodically for the existance of the done.dat file. The OS handles the the multi-processing.

Second, If the procedure you are working with has a big loop and the cpu time per loop is small, then you can call WIDGET_EVENT within your loop and handle the events of your GUI yourself. If there are no events, then you go right back to processing another loop iteration. I have done this many times, and it works quite well. However - be careful to block GUI events you don't want repeated. E.g. if your loop was to process a hundred CT images and create output files, you don't want to invoke it a second time if the first one is not done. The easiest way to do this, is set the widgets you don't want to re-invoke with a sensitive=0. When your done processing, make the widget sensitive again.

Gary Muswick
University Hospitals of Cleveland

Subject: Re: does IDL support multi threading Posted by Paul Sorenson on Sat, 15 Jun 2002 19:44:25 GMT View Forum Message <> Reply to Message

"Gary Muswick" <muswick@uhrad.com> wrote in message news:177004ba.0206150545.4b583636@posting.google.com...

>

- > Second, If the procedure you are working with has a big loop and the
- > cpu time per loop is small, then you can call WIDGET_EVENT within your
- > loop and handle the events of your GUI yourself. If there are no
- > events, then you go right back to processing another loop iteration.

DEMO_TOUR does this. You can see the demo tour run by typing 'demo_tour' at the IDL prompt.

Paul Sorenson

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Subject: Re: does IDL support multi threading Posted by R.Bauer on Tue, 18 Jun 2002 07:08:10 GMT View Forum Message <> Reply to Message

Ashwin wrote:

>

- > I have a GUI written using IDL . When a procedure is executing i am not able
- > to select/click any button on GUI.i.e the GUI is completely inactive and
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- > to make the GUI have a higher priority than other procedures.

Dear Ashwin

That's depends on how you have written your widget.

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl_html/dbase/download/x_animate.tar.gz or as idl5.5 binary

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/x_animate.sav

For further routines or licensing please have a look at http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml

Example:

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _work/fr_lib/examples/c3h8.anim

After loading the animation and pressing the play button every other button

could be selected to do a different action while one action is running. e.g. you can change the rate or the switch to loop.

I can later on explain more in detail how this is done if this is what you like to have.

regards

Reimar

D -:--

Reimar Bauer

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a IDL library at ForschungsZentrum Juelich http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml