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