## Subject: GUI interface update issues Posted by Rick Towler on Tue, 21 Jun 2005 16:23:39 GMT View Forum Message <> Reply to Message

Hello group,

I have an interesting problem with gui redraw on WinXP which maybe someone can shed some light on.

I have an application that uses David's progress bar object. We have some potentially long calculation times and it is important to give a little feedback. It worked great until I added the ability to call a new calculation routine written in C as a dlm. If I run the application the old way (all functions written in IDL) the progress bar and GUI interface function normally. But if I run the application using the external routine eventually the GUI interface stops redrawing, the drop down menu text disappears, and the progress bar fails to update. The application runs and when calculations are finished it returns to normal (progress bar is destroyed and interface works as expected) but there is no feedback while running. A problem since the new calculations can take hours and hours and it is nice to see where it is in the process.

```
The program is structured like so:
·----
setup stuff
for loop begin
  progressBar->update
  if (use_dlm) then begin
    myDLM_proc, param1, param2, OUT1=out1, OUT2=out2...
  endif else begin
    IDLbased_proc, param1, param2, OUT1=out1, OUT2=out2...
  endelse
  for loop begin
   if (use dlm) then begin
     anotherDLM proc, param1, param2, OUT1=out1,OUT2=out2...
   endif else begin
     anotherIDLbased_proc, param1, param2, OUT1=out1,OUT2=out2...
   endelse
  endfor
endfor
```

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Actually a lot more is going on but you get the idea.

And to elaborate on what I mean by "eventually the gui stops responding". If I start the application and run a short calculation (~2 minutes) the first time the gui functions normally. But with every subsequent run the progress bar moves maybe 20% of the way then I lose the gui. If I close and restart the application the same thing happens, first one works, then problems). If I run a long calculation (hours) the progress bar never moves past the first tick (maybe 1%).

Why does IDL stop updating the gui? Any ideas? While the functions in the dlm are compute intensive, they aren't particularly complicated and only rely on some simple macros in an .h file. Just a \*lot\* of looping over a moderate amount of data.

-Rick