Subject: Catching events within Widgets
Posted by justin on Fri, 08 Mar 1996 08:00:00 GMT
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My problem is this: I have written a widget program with start and stop buttons, the trouble is once the start button is pressed the called procedure grabs control of IDL and so the stop button has no effect.
At present there is a flag defined in common blocks within the event handler and the called procedure, and the procedure runs on a 'while flag eq 1' type loop. When the stop button is pressed the flag should be set to zero so the procedure 'hears about' it through the common block. The events do get queued, yet they are never actioned on.
Is there anyway to check to see if any events are queued and if so action on them, and do this within a procedure?
Without going into details, using the timer event just isn't suitable for my procedure.

Thanks for any help,

Justin.

PS Should you reply could you email also since my news provider is expiring articles every 24hours at best- thanks.

Justin Ashmall
Space Physics Group, Imperial College, London
email justin@ic.ac.uk or j.ashmall@ic.ac.uk

Subject: Re: Catching events within Widgets
Posted by jlaw on Fri, 08 Mar 1996 08:00:00 GMT
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If you ignore some of the documentation, you can do this...

```
pro loop,ev
common ctl,ok,button1,button2,base
  if ok eq 1 then return
  ok = 1
  i = 0
  while ok do begin
    i = i + 1
    for j = 0 , 100 do void
    widget_control,button1,set_value=string(i)
;
    event=widget_event(base,/nowait)
;   ^^^^^^^^^^^^^^^^^^^^ Lets IDL find out whats going on in the world.
  end
```

```
end
pro ender,ev
common ctl,ok,button1,button2,base
  ok = 0
  widget_control,button1,set_value='start'
  return
end
pro starter
common ctl,ok,button1,button2,base
  ok = 0
  base=widget_base(/row)
  button1 = widget_button(base,value='start',event_pro='loop')
  button2 = widget_button(base,value='stop',event_pro='ender')
  widget_control,base,/real
  xmanager,'',base
  return
end
```

Subject: Re: Catching events within Widgets
Posted by rivers on Fri, 08 Mar 1996 08:00:00 GMT
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In article <4hpdpg$205@oban.cc.ic.ac.uk>, justin@ic.ac.uk (Justin) writes:
>
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> buttons, the trouble is once the start button is pressed the called procedure
> grabs control of IDL and so the stop button has no effect.
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> them, and do this within a procedure?
> Without going into details, using the timer event just isn't suitable for my
> procedure.

The fundamental problem is that IDL only allows a single thread of execution. When you called your procedure it will run until completion because the only way for the flag in your common block to get updated is for XMANAGER to call your event handler and set the flag. But XMANAGER never gets to run (it is just another IDL procedure) until your called procedure returns.

The behavior you describe is extremely desirable for many applications. It will require IDL to support multi-threaded execution. Someday?

Mark Rivers (312) 702-2279 (office)
CARS (312) 702-9951 (secretary)
Univ. of Chicago (312) 702-5454 (FAX)
5640 S. Ellis Ave. (708) 922-0499 (home)
Chicago, IL 60637 rivers@cars3.uchicago.edu (Internet)