
Subject: Re: Help with pick menu widget code
Posted by [davidf](#) on Wed, 16 Sep 1998 07:00:00 GMT
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Rose Longfield writes:

- > I wasn't able to solve Doug's problem. I found the Uvalue error but could
- > not understand why the Widget ID was not valid, when, every time I printed it
- > it had a number that matched the event.top.
- >
- > That's because I was looking in the wrong place! As David Fanning astutely
- > pointed out, the error was in the SET command at the bottom of the program,
- > FAR away from where I thought it was.

When you have taught as many IDL courses as I have both of these common errors just sort of jump out at you. :-) But if you get an error message that a pointer (or info) structure is not defined, there are only about three things that could be wrong: (1) You didn't copy it into the program module (the problem here, but the least likely error in my experience), (2) You forgot to put the pointer (or info structure) into the UValue of the TLB (the most likely possibility), or (3) you took it out with a NO_COPY, but failed to put it back before you exited the module. (The last problem should occur only with info structures. You shouldn't be copying pointers, as I pointed out yesterday.)

- > The message from XMANAGER states simply: % XMANAGER: Caught unexpected error
- > from client application. Message follows... % WIDGET_CONTROL: Invalid widget
- > identifier: 61.

I agree that this is a cryptic message, although one I see so often when people are writing their first widget programs that I know the solution almost without thinking about it now. I do remember struggling for an hour or so the first time it happened to me, however.

- > There are widget controls all over the code, is there any way for XMANAGER to
- > be a little more helpful about identifying, WHICH widget_control was causing
- > the error?

Let me give you a tip for solving errors like this a little more easily. The XManager routine has a CATCH statement in it. The way error handling in IDL works is that if there is a CATCH statement anywhere along the "program trace" (I don't know a good way to say this, but if one program calls another and that program calls another, you are now three programs deep in the "trace"), then the error gets handled by that CATCH statement.

What you really want is for the error in your widget program to

propagate all the way up to the main IDL level, where IDL will attach a line number to the error. Then, at least, you will know what line of code caused the error, if not what the error means exactly.

To make the error propagate all the way up, you have to turn any CATCH error handling off in the module that is causing the error, and you have to turn it off for XManager. You do this by typing this command on the IDL command line **before** you run your program:

```
IDL> XManager, Catch=0
```

Now when you run the program, you get this error message:

```
% WIDGET_CONTROL: Invalid widget identifier: 3.  
% Execution halted at: PICKFINISH_EVENT 323 C:\RS\IDL51\david\junk.pro
```

I can go to line 323 in my code and try to figure out why the only widget identified there (event.top) is somehow invalid. It may only take me a half-hour to realize that I just killed the sucker. :-)

Cheers,

David

P.S. Rose, are you coming to my October course in Denmark?

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