Subject: Re: IDLVM and retall Posted by Foldy Lajos on Tue, 05 Sep 2006 15:31:04 GMT View Forum Message <> Reply to Message

On Mon, 4 Sep 2006, JD Smith wrote:

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>
>
> I have a large widget program which runs (optionally) under the IDLVM.
> Around IDL version 6.0, when the VM was introduced, there was an
> inconsistency in how non-blocking widgets were dealt with in the VM
> vs. a normal IDL session, which was fixed in IDL 6.1:
>
   Beginning with IDL 6.1, the XMANAGER procedure honors the value of
>
   the NO_BLOCK keyword in Runtime and Virtual Machine modes.
>
>
   Because XMANAGER did not honor the NO BLOCK keyword in previous
>
   releases, widget applications that worked properly (that is, not
>
   blocking) when run in a licensed full version of IDL behaved
>
   differently when run in Runtime or Virtual Machine mode. This
>
   difference in behavior has been removed; widget applications should
>
   behave identically (with regard to blocking behavior) in all IDL
>
   licensing modes.
>
>
   Other differences between IDL's Virtual Machine mode and full
>
   licensed mode, such as the fact that programs that call the IDL
>
   EXECUTE function will not run in the IDL Virtual Machine, are still
>
   in effect. If you have modified your widget application to work
>
   around the old blocking behavior by removing the NO BLOCK keyword
>
   from calls to XMANAGER or by substituting the JUST REG keyword, you
>
   may need to reinsert the NO BLOCK keyword to achieve the desired
   behavior.
>
>
> My program has an error catching system that differentiates between
> two modes: running with a GUI, or running "lights-out" as a script.
> In the former case, the error is caught, displayed for the user with
> DIALOG_MESSAGE, and the RETALL command is then issued to return all
> the way back to the active command line, letting the program continue
> to run. When running as a script, instead MESSAGE is called, and the
> error halts the program.
>
> What I have just discovered, to my dismay, is that RETALL completely
> closes down an IDLVM session, rather than returning to its
> "non-blocking" widget event processing shell, as the above 6.1 update
> note would imply.
>
> Here's an example
```

>

```
> ;;; file test_vm.pro
> pro test vm event, ev
> a=dialog_message('Testing RETALL',/ERROR)
   retall
   return
>
> end
>
> pro test_vm
   b=widget base(/ROW)
   but=widget button(b,VALUE='Do It!')
>
   widget control, b,/realize
   XManager, 'test vm', b, /NO BLOCK
   return
>
> end
>
>
> Run TEST VM in a fresh IDL session, and you'll see a button. Click
> it, get an error message 'Testing RETALL', but the tiny app will
> continue to run (the desired behavior).
> Now compile it to a .sav file:
>
 IDL> save,FILE='test_vm.sav',/ROUTINES
>
> quit IDL, and then:
>
> % idl -vm=test_vm.sav
> You'll see the same button. Click it, get the 'Testing RETALL'
> message, but notice that now when the message is dismissed and RETALL
> is called, the entire IDLVM session is shut down! I'm not sure why
> this is the case, but I need a way to work around it. Since there are
> many simultaneous event components all injecting events into the
> program suite, there is no convenient place to put a top level CATCH.
> I was relying on the background event processing inside of IDL to
> continue to run, i.e. to serve as an absolute top-level catch, but it
> doesn't do so in the VM.
> Suggestions appreciated.
>
> JD
>
probably a CATCH in main helps. It works in IDL 6.2 (linux).
regards,
lajos
```

```
;;; file test_vm.pro
pro test_vm_event, ev
on_error, 1
a=dialog_message('Testing RETALL',/ERROR)
 message, /noprint
 return
end
pro test_vm
 b=widget_base(/ROW)
but=widget_button(b,VALUE='Do It!')
widget_control, b,/realize
XManager, 'test_vm', b, /NO_BLOCK
 return
end
while 1 do
  catch, status
  if status ne 0 then catch, /cancel
  wait, 1
endwhile
```

end