Subject: Re: how to stop a procedure in idlwave Posted by JD Smith on Thu, 30 Jun 2005 18:11:00 GMT

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On Thu, 30 Jun 2005 07:49:46 -0700, Jess wrote:

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> Hi All,
>
> I know this is a basic question, but I am having trouble stopping IDL
> procedures in IDLwave. In a normal IDL shell I found I could stop a
> running procedure by typing fullstop and C-c. I do this quite often,
> and find that I use it to examine variables in the subroutine that is
> currently being run or to fix a section before re-running. Sometimes
> this is in the middle of a loop, other times it is when IDL is waiting
> for user input at a read command.
>
> str = "
> read,str,prompt='Enter string: '
>
> Running the same code in IDLwave I find it very difficult to stop a
> program and get back to an idl shell prompt. I've tried C-c C-z, and
> C-c C-c, to no avail. In the end I often have to kill the entire idl
> session within idlwave with C-c C-\.
>
> I know I can enter 'stop' in the code, at which point it will stop on
> re-run. But I would much rather an interactive, rather than pre-coding
> a stop command which requires anticipating where I will need to make
> amendments. Waiting til the program completes before making amendments
> can be guite some time, so I'd rather not do that either.
>
> Sorry I haven't already figured this out.
> Thanks.
> Jess
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C-c C-c sends the same interrupt signal to the process that C-c does in an xterm. I have found that sometimes, not always, IDL refuses to respond to interrupts, so this is more of an issue with IDL than with IDLWAVE.

> functions I need and then runs the top-level program.

> nb: Usually I run a batch program that compiles all the procedures and

As mentioned, IDLWAVE handles keyboard input to IDL differently than an XTerm or IDLDE (since it allows you so much flexible editing power at the command line). A return will always be sent to IDL, but if you want other individual characters to be sent to IDL one at a time (e.g. if it's waiting using GET KBRD()), you need to enable "temporary

character mode" with C-c C-y.

If you have areas of code you are trying to stop in, I highly recommend setting a breakpoint there. Just C-c C-d C-b on the line. BP's can be removed, temporarily disabled, have trigger counts and conditions, etc. (and try right-clicking on a BP line if you have the latest IDLWAVE). Then you can use the examine commands to see what your variables are doing. Far more flexible and predictable than hoping you interrupt at the exact right moment. By the way, I often use "h" in electric debug mode for this kind of thing: set a BP at the beginning of a routine you're interested in debugging, then position the cursor and use "h" to run to "here", so you don't have to step through all the intermediate stuff. Alternatively, set several approximate breakpoints, and use "r" to skip through them. You might like to read up on the breakpoint and examine features in the manual.

JD