Subject: Tab completion of variables and routines at the IDL command line Posted by Allan Whiteford on Tue, 10 Jul 2007 08:23:53 GMT

View Forum Message <> Reply to Message

Dear all.

Yesterday I got annoyed enough with the lack of tab completion inside a standard UNIX tty session (i.e. not the development environment) that I tried to implement something which I've suspected for a while should give me tab completion.

Anyway, turned out it worked, after a fashion.

(For background on tab completion if you don't know what I'm talking about see, e.g.:

http://www.cmp.liv.ac.uk/docs/linux_guide/node28.html

chances are though, if you didn't know what it was then you probably aren't too bothered about having it.)

I now have an IDL command line that will tab complete variables in the current scope, compiled functions (and append a '(' to them) and compiled procedures (and append a ',' to them). System procedures and functions are also handled.

What it DOESN'T do (yet) is:

Tab complete structure tags.

Realise you can't have a function call as the first item on the command line.

Realise you can't have a procedure call as anything except the first item (or, I guess, after a '&').

Tab complete keywords to routines. *

Retain support for saving history between sessions.

Handle Ctrl-C interrupts as gracefully as it should. *

Expand on uncompiled routines. *

Full understanding of when a new tab completion can start (e.g. after a ',' or a '(' - at the moment it's on space).

Look at IDL system variables (or somewhere) to get options for how the

tab completion should work.

Tab complete filenames when appropriate (e.g. after a ".r").

Gracefully handle exiting from inside an IDL procedure (by calling the "quit" routine). *

With the exception of the starred items above, all of the others are really my immediate wishlist can/will probably be implemented this week.

Now, the question...

Is anyone else interested in this? If so then you're welcome to the code but if there is sufficient interest (more than five people, say) then I'll attempt to produce compilation instructions (of course, first I have to understand the compilation step) and possibly binaries for different versions of IDL.

It could be that most people are using either IDLDE or IDLWAVE in which case I'm one of the few luddites left unwilling to abandon a standard TTY. Also, if this feature already exists in a standard TTY then break the news to me gently:).

I should say that the way in which this is implemented is truly awful and there has to be a better way to do it. However, I gave up waiting for someone smarter (hint hint ITTVIS) to do it and just did it myself.

As an additional warning I should point out that I've not written any serious C in years and that all of the malloc'ing and the realisation I could put most of the code in a macro seemed a lot more obvious after a glass of wine. Use at your peril:).

Let me know if you're interested either by posting to the group or by e-mail and I'll assess demand. Depending on who is interested I'll perhaps do a pre-release to people who are better equipped than me to assess how dangerous the code is before I distribute it to many people. Please also indicate if you think you can help in a testing or code evaluation step.

Allan

Subject: Re: Tab completion of variables and routines at the IDL command line Posted by alvin[1] on Fri, 20 Jul 2007 06:07:21 GMT

View Forum Message <> Reply to Message

Please post the instructions quick. I think its quite useful. It will catch on as soon as the word spreads. I have a bunch of IDL student here at IIAP, India, and more is interested to learn. The command line completion is a plus for new people to learn quickly. I say good job!

Alvin Das