Subject: Re: On-the-fly compilation of routines Posted by R.Bauer on Thu, 06 Nov 2008 08:57:12 GMT

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gsever schrieb:

- > Hello,
- >
- > I would like to know whether it is possible to compile a routine while
- > I am already running my main IDL program?

yes

- > To illustrate more this, I will explain my intention a bit more. We
- > have a powerful IDL-based data analysis tool in our atmospheric
- > sciences department to analyze airborne acquired data. I am currently
- > working on a spectrum plot routine of the this tool-suite to make
- > small modification and learning purposes. I successfully debug the
- > routines from within the IDL Workbench, but whenever I make a change
- > on the program or wanted to set a new breakpoint I have to restart the
- > program and compile all the routines. My question is again, is there a
- > way to update my current routine in a way to see the changes are going
- > to be reflected without restarting and compiling everything?

yes

- >
- > Another point is, can we compile only the recently changed routines in
- > the beginning of each compilation process?

yes

- >
- > I appreciate your comments on these issues.
- > Thank you again.

I have no idea how you organize your routines but there are common rules.

- a) use one file per routine
- b) name the file name of the file exactly the same as your routine b.a) use the extension .pro
- c) use always lower case file names.
- d) make sure your file are saved in the the idl search path, check !path
- e) file a bug report if it does not behave (you already doing so)

if not a) make sure the last routine in the file is the one used for the file name.

For example just open the ide and call print, mean(findgen(10)). mean is a idl source function. You can open it by .edit mean on the idl input line.

cheers Reimar

Subject: Re: On-the-fly compilation of routines Posted by gsever on Thu, 06 Nov 2008 15:19:49 GMT View Forum Message <> Reply to Message

Hello,

Thanks for your inputs.

Could you please elaborate a little more your yes answers?

```
On Nov 6, 2:57 am, Reimar Bauer < R.Ba...@fz-juelich.de> wrote:
> gsever schrieb:
>> Hello.
>
>> I would like to know whether it is possible to compile a routine while
>> I am already running my main IDL program?
> yes
>> To illustrate more this, I will explain my intention a bit more. We
>> have a powerful IDL-based data analysis tool in our atmospheric
>> sciences department to analyze airborne acquired data. I am currently
>> working on a spectrum plot routine of the this tool-suite to make
>> small modification and learning purposes. I successfully debug the
>> routines from within the IDL Workbench, but whenever I make a change
>> on the program or wanted to set a new breakpoint I have to restart the
>> program and compile all the routines. My question is again, is there a
>> way to update my current routine in a way to see the changes are going
>> to be reflected without restarting and compiling everything?
>
> yes
>
>
```

>> Another point is, can we compile only the recently changed routines in

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>> Thank you again.
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  a) use one file per routine
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    !path
>
>
   e) file a bug report if it does not behave (you already doing so)
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 file name.
> For example just open the ide and call print, mean(findgen(10)).
> mean is a idl source function. You can open it by .edit mean on the idl
> input line.
> cheers
> Reimar
```

Subject: Re: On-the-fly compilation of routines Posted by David Fanning on Thu, 06 Nov 2008 15:31:25 GMT View Forum Message <> Reply to Message

gsever writes:

> Could you please elaborate a little more your yes answers?

I think what Reimar means is that this is *always* how things work in IDL. It would be extremely unnatural if you always had to compile files in IDL. Once compiled, IDL programs stay compiled for that IDL session, unless you specifically recompile them. You can recompile any program that changed at any time you like. Then, you will be running the *new* compiled program.

Cheers,
David

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Covote's Guide to IDL Programming: http://w

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: On-the-fly compilation of routines Posted by R.Bauer on Thu, 06 Nov 2008 16:00:47 GMT

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gsever schrieb:

> Hello.

>

> Thanks for your inputs.

>

> Could you please elaborate a little more your yes answers?

try out the example at bottom and read the messages in your log window. That's how it works.

cheers Reimar

>

> On Nov 6, 2:57 am, Reimar Bauer <R.Ba...@fz-juelich.de> wrote:

>> gsever schrieb:

>>

>>> Hello,

>>> I would like to know whether it is possible to compile a routine while

>>> I am already running my main IDL program?

>> yes

>>

>>> To illustrate more this, I will explain my intention a bit more. We

>>> have a powerful IDL-based data analysis tool in our atmospheric

>>> sciences department to analyze airborne acquired data. I am currently

>>> working on a spectrum plot routine of the this tool-suite to make

>>> small modification and learning purposes. I successfully debug the

>>> routines from within the IDL Workbench, but whenever I make a change

>>> on the program or wanted to set a new breakpoint I have to restart the >>> program and compile all the routines. My question is again, is there a

>>> way to update my current routine in a way to see the changes are going

>>> to be reflected without restarting and compiling everything?

>> yes

>>

```
>>
>>
>>> Another point is, can we compile only the recently changed routines in
>>> the beginning of each compilation process?
>> yes
>>
>>
>>
>>> I appreciate your comments on these issues.
>>> Thank you again.
>> I have no idea how you organize your routines but there are common rules.
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>> a) use one file per routine
>> b) name the file name of the file exactly the same as your routine
   b.a) use the extension .pro
>> c) use always lower case file names.
>> d) make sure your file are saved in the the idl search path, check
     !path
>>
>>
    e) file a bug report if it does not behave (you already doing so)
>>
>> if not a) make sure the last routine in the file is the one used for the
>> file name.
>>
>> For example just open the ide and call print, mean(findgen(10)).
>> mean is a idl source function. You can open it by .edit mean on the idl
>> input line.
>>
>> cheers
>> Reimar
```

Subject: Re: On-the-fly compilation of routines
Posted by edward.s.meinel@aero. on Thu, 06 Nov 2008 16:05:18 GMT
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On Nov 6, 10:31 am, David Fanning <n...@dfanning.com> wrote:

- > gsever writes:
- >> Could you please elaborate a little more your yes answers?
- > I think what Reimar means is that this is *always* how things
- > work in IDL. It would be extremely unnatural if you always
- > had to compile files in IDL. Once compiled, IDL programs
- > stay compiled for that IDL session, unless you specifically
- > recompile them. You can recompile any program that changed
- > at any time you like. Then, you will be running the *new*
- > compiled program.

```
> Cheers,
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
And that command would be ... <drum roll> ...
.compile your_program_name
<cymbal splash>
```

Ed M

Subject: Re: On-the-fly compilation of routines Posted by gsever on Thu, 06 Nov 2008 17:05:06 GMT View Forum Message <> Reply to Message

So my understanding is IDL interpreter itself can not sense the change and re-compile the necessary procedure throughout the flow of the program. Every time I make a modification on the source-code I have to re-compile the routine on the console or command shell to reflect this change.

Once again, in the same IDL session, when I first launch the program 168 routines are compiled, after I make an addition the source code of one file, and re-run the program all 168 routines are re-compiled again. This is controversial to Reimer Bauer's yes answer.

```
On Nov 6, 10:05 am, "edward.s.mei...@aero.org" <mei...@aero.org> wrote:

> On Nov 6, 10:31 am, David Fanning <n...@dfanning.com> wrote:
>
> gsever writes:
>>> Could you please elaborate a little more your yes answers?
>
> I think what Reimar means is that this is *always* how things
>> work in IDL. It would be extremely unnatural if you always
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>> Cheers,
>> David
>> --
>> David Fanning, Ph.D.
>> Fanning Software Consulting, Inc.
>> Coyote's Guide to IDL Programming:http://www.dfanning.com/
>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>> And that command would be ... <drum roll> ...
> .compile your_program_name
> <cymbal splash>
> Ed M
```

Subject: Re: On-the-fly compilation of routines Posted by Andrew Cool on Fri, 07 Nov 2008 01:30:00 GMT View Forum Message <> Reply to Message

> mean is a idl source function. You can open it by .edit mean on the idl input line.

Well I'll be!!

17 years programming in IDL and I never knew this.

What else don't I know? I'll go ask my wife - she'll tell me... ;-)

Andrew