
Subject: Re: Changing common variable definition

Posted by [tai](#) on Tue, 26 Jul 1994 11:52:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

Matthew Larkum (larkum@optolab.unibe.ch) wrote:

```
: common my_vars, x, y
: and then add a variable:
: common my_vars, x, y, z
: and recompile, I get an error:
: % Attempt to extend previously defined common: MY_VARS
: Is there any way to redefine a common variable?
```

No, your common block definitions must all be the same (ala Fortran).

If you're using IDL version 3.6, you can just do the following:

```
common my_vars, x, y
...
common my_vars
```

If you're using an earlier version, my suggestion is to go with an @include_file.

```
main program:
  @globals.pro
...
  @globals.pro
```

```
globals.pro:
  common my_vars, x, y
```

Hope this helps.

Alan

Subject: Re: Changing common variable definition

Posted by [larkum](#) on Tue, 26 Jul 1994 13:17:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

In article fnd@reznor.larc.nasa.gov, tai@rockola.larc.nasa.gov (Alan Tai) writes:

> Matthew Larkum (larkum@optolab.unibe.ch) wrote:

```
> : common my_vars, x, y
> : and then add a variable:
> : common my_vars, x, y, z
> : and recompile, I get an error:
> : % Attempt to extend previously defined common: MY_VARS
> : Is there any way to redefine a common variable?
```

```

>
> No, your common block definitions must all be the same (ala Fortran).
> If you're using IDL version 3.6, you can just do the following:
>
>   common my_vars, x, y
>   ...
>   common my_vars
>
> If you're using an earlier version, my suggestion is to go with an
> @include_file.
>
> main program:
>   @globals.pro
>   ...
>   @globals.pro
>
> globals.pro:
>   common my_vars, x, y
>
> Hope this helps.

```

No, this isn't quite what I was getting at. I don't want to have different common variable definitions in different modules, I simply want to be able to add a variable to all modules, recompile and proceed. Taking your example I tried:

```

pro subroutine
@globals.pro

print, 'This is the subroutine'
end

pro test
@globals.pro

print, 'This is the main routine'
end

```

The globals.pro file was initially:

```
common my_vars, x, y
```

Works fine. Then I say, "Wait a minute. I forgot. I also need a variable 'z'. Fine, make the globals.pro file:

```
common my_vars, x, y, z
```

```

run test
% Attempt to extend previously defined common: MY_VARS
At: /$DIRECTORY/globals

```

The only way I know to continue at the moment is to exit and restart. This happens running IDL for windows and PV-Wave 4.01 on a Sun workstation.

I'm sure there's something I don't understand, but I can't find anything about it in the manual or the FAQ.

Thanks again,

Matthew
larkum@optolab.unibe.ch

Subject: Re: Changing common variable definition
Posted by [andy](#) on Tue, 26 Jul 1994 13:20:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article <312ne0\$1ug@aragorn.unibe.ch>, larkum@optolab.unibe.ch (Matthew Larkum) writes:

> Hi,
> If I write some routines that share the line say:
> common my_vars, x, y
> and then add a variable:
> common my_vars, x, y, z
> and recompile, I get an error:
> % Attempt to extend previously defined common: MY_VARS
> Is there any way to redefine a common variable?
> Thanks,
> Matthew
> larkum@optolab.unibe.ch
>

I believe that in order to redefine a COMMON block one must make the appropriate changes, exit IDL, and then re-enter IDL and run the procedure.

--

,__o Andrew F. Loughe (Mail Code 971)
- _<, NASA Goddard Space Flight Center phone: (301) 286-5899
(*)/'(*) Greenbelt, MD 20771 email: andy.loughe@gsfc.nasa.gov

Subject: Re: Changing common variable definition
Posted by [tai](#) on Tue, 26 Jul 1994 13:35:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

Matthew Larkum (larkum@optolab.unibe.ch) wrote:
: Works fine. Then I say, "Wait a minute. I forgot. I also need

: a variable 'z'. Fine, make the globals.pro file:
: common my_vars, x, y, z

: run test
: % Attempt to extend previously defined common: MY_VARS
: At: /\$DIRECTORY/globals

: The only way I know to continue at the moment is to exit and
: restart. This happens running IDL for windows and PV-Wave 4.01
: on a Sun workstation.

Yes, I noticed that too. I don't know of any other way to extend it than to exit and restart. I remember I couldn't figure it out for the longest time.

Alan

Subject: Re: Changing common variable definition
Posted by [thompson](#) on Tue, 26 Jul 1994 13:42:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

larkum@optolab.unibe.ch (Matthew Larkum) writes:

> ... I don't want to have
> different common variable definitions in different modules, I
> simply want to be able to add a variable to all modules, recompile
> and proceed. ...

> The only way I know to continue at the moment is to exit and
> restart. This happens running IDL for windows and PV-Wave 4.01
> on a Sun workstation.

> I'm sure there's something I don't understand, but I can't find
> anything about it in the manual or the FAQ.

No, you understand it correctly. One thing I can suggest, if you want to be able to add variables to common blocks after they're defined, is to encapsulate your variables into an anonymous structure. You could then redefine this structure (as long as it's anonymous) to your heart's content.

The release notes for IDL 3.6 says that you can now nest anonymous structures. Hurray!!!

Bill Thompson
