
Subject: Re: creating a variable from unknow name

Posted by [KM](#) on Thu, 30 Dec 2004 03:43:13 GMT

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On Wed, 29 Dec 2004, Andry William wrote:

- > I would to ask some advice on how I can create a variable with the
- > name defined by some value in the memory.
- >
- > I would like to be able to do the same in IDL. I first have to
- > check which variable is present in a file (atcuallly they are
- > NetCDF files), then assign the values to the name defined in the
- > file.
- >
- > Something like if I see that the variable "lon" exists in a file,
- > then assign its values to the name "lon".
- >
- > I am not sure if I need some pointer or object for that.

I think you could do it using a pointer (that is how the read_netcdf procedure does it I tihnk). I don't think you need objects.

But I would do it without pointers like this:

```
r = EXECUTE( "a=2" )
```

```
help, a
```

Does this do what you want?

-k.

Subject: Re: creating a variable from unknow name

Posted by [R.Bauer](#) on Thu, 30 Dec 2004 13:32:58 GMT

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Andry William wrote:

- > Dear IDL user,
- >
- > I would to ask some advice on how I can create a variable with the name
- > defined by some value in the memory. I mean: in unix/linux CSH, one can
- > say
- >
- > set a = b1
- > set \$a = 4
- > so that the value stored in the variable name b1 is 4
- > echo \$b1 (returns)
- > 4

>
> I would like to be able to do the same in IDL. I first have to check which
> variable is present in a file (atcuually they are NetCDF files), then
> assign the values to the name defined in the file.
>
> Something like if I see that the variable "lon" exists in a file, then
> assign its values to the name "lon".
>
> I am not sure if I need some pointer or object for that.
>
> Thanks in advance for your help.
>
> Best wishes for the new year for all of you.
>
> Andry

Dear Andry

probaly you could use our read_ncdf routine. The structure you got returned looks similar to this one.

The short_name is the real netcdf name because the tagname has it's own rules. Only characters which are able to use for variables could be used as tagnames.

This data structure is used for several routines of the icg idl library.

```
; EXAMPLE:
; result=read_ncdf('ghost.nc')
; help,result,/str
; ** Structure <10b5508>, 7 tags, length=3072, refs=1:
; !FILENAME    STRING  'ghost.nc'
; !GLOBAL      STRUCT  -> <Anonymous> Array[1]
; TIME         STRUCT  -> <Anonymous> Array[1]
; N2O          STRUCT  -> <Anonymous> Array[1]
; F12          STRUCT  -> <Anonymous> Array[1]
;
;
; result=read_ncdf('ghost.nc','F12')
; ** Structure <10b25d4>, 6 tags, length=2256, refs=1:
; !FILENAME    STRING  'ghost.nc'
; !GLOBAL      STRUCT  -> <Anonymous> Array[1]
; TIME         STRUCT  -> <Anonymous> Array[1]
; F12          STRUCT  -> <Anonymous> Array[1]
;
;
; help,result.global,/str
; ** Structure <10b31b0>, 6 tags, length=268, refs=2:
; GPARAM       STRUCT  -> <Anonymous> Array[1]
```

```

; HISTORY      STRING  Array[1]
; PI           STRUCT  -> <Anonymous> Array[1]
; DATASET      STRUCT  -> <Anonymous> Array[1]
; PLATFORM     STRUCT  -> <Anonymous> Array[1]
; EXP          STRUCT  -> <Anonymous> Array[1]
;
;
; help,result.f12,/str
; ** Structure <10aa984>, 20 tags, length=808, refs=2:
;   STATUS      STRUCT  -> <Anonymous> Array[1]
;   SHORT_NAME   STRING  'F12'
;   FLAG         STRING  'NONE'
;   SAMPLE_INTERVAL FLOAT    0.000000
;   ADD_OFFSET   FLOAT    0.000000
;   SCALE_FACTOR  FLOAT    1.00000
;   UNITS        STRING  'pptv'
;   FORTRAN_FORMAT STRING  'F6.2'
;   LONG_NAME     STRING  'CF!!2!NC!!2!N'
;   DE_LONG_NAME  STRING  'CF!!2!NC!!2!N'
;   DESCRIPTION   STRING  'Data Retrieval via smoothed chromatogram
(Gol'.
;
; ..
;   DE_DESCRIPTION STRING  'DE_DESCRIPTION= Auswertung per gegli  tetem
Ch'.
;
; ..
;   FILL_VALUE    FLOAT    999.900
;   STDEV_REL     DOUBLE   0.0065000000
;   PARAM         FLOAT    Array[87]
;   PLOT_MIN      FLOAT    460.600
;   PLOT_MAX      FLOAT    541.000
;   VALID         LONG     Array[84]
;   FILLED        LONG     Array[3]

```

At the moment the server is down. If it is restarted then you could get it from here

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html

cheers

Reimar

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Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
<http://www.fz-juelich.de/icg/icg-i/>

=====

a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html

Subject: Re: creating a variable from unknow name
Posted by [war](#) on Mon, 03 Jan 2005 01:21:35 GMT
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Thanks to all who have replied to my question. All the suggestions just helped me in what I want to do.

Regards,

Andry
