Subject: How to see if variable is defined?
Posted by rfinch on Fri, 20 Jan 1995 17:43:31 GMT
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Is there a nice way of checking if a variable is defined?

I have a widget_control command which removes a menu, and I need to
see if the menu is defined before destroying it.
--
Ralph Finch 916-653-8268:voice 916-653-6077:fax
rfinch@dop.water.ca.gov / finger for PGP public key
"Nada burra la chamaca." A.G.
Any opinions expressed are my own; they do not represent my employer

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Subject: Re: How to see if variable is defined?
Posted by thompson on Mon, 23 Jan 1995 15:47:25 GMT
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rfinch@water.ca.gov (Ralph Finch) writes:

> Is there a nice way of checking if a variable is defined?

> I have a widget_control command which removes a menu, and I need to
> see if the menu is defined before destroying it.

You can always use

 IF N_ELEMENTS(variable) NE 0 THEN ...

Bill Thompson

Subject: Re: How to see if variable is defined?
Posted by rep2857 on Tue, 24 Jan 1995 16:22:32 GMT
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In article <RFINCH.95Jan20094331@venice.water.ca.gov>,
Ralph Finch <rfinch@water.ca.gov> wrote:
> Is there a nice way of checking if a variable is defined?
>
> I have a widget_control command which removes a menu, and I need to
> see if the menu is defined before destroying it.

In the general case of checking whether a variable is defined you can
use the size() function. For example:

```
IDL>  print, var
% PRINT: Variable is undefined: VAR.
% Execution halted at $MAIN$   (PRINT).
IDL> print, size(var)
      0        0        1
```

The first parameter will be a zero if var is undefined.

For widgets in particular, the widget_info function has a "valid_id"
keyword which can check to see if the widget is a valid ID. Based on
the return from the call you can destroy the widget with
widget_control, /destroy.

```
if (Widget_Info(tac_base, /valid_id)) then $
 Widget_Control, tac_base, /Destroy
```

Mike Schienle   Hughes Santa Barbara Research Center
rep2857@sbsun0010.sbrc.hac.com   75 Coromar Drive, M/S B28/87
Voice: (805)562-7466   Fax: (805)562-7881   Goleta, CA 93117

Subject: Re: How to see if variable is defined?
Posted by nmw on Thu, 26 Jan 1995 11:18:01 GMT
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In article 95Jan20094331@venice.water.ca.gov, rfinch@water.ca.gov (Ralph Finch) writes:
> Is there a nice way of checking if a variable is defined?
>
> I have a widget_control command which removes a menu, and I need to
> see if the menu is defined before destroying it.
> --
> Ralph Finch 916-653-8268:voice 916-653-6077:fax
> rfinch@dop.water.ca.gov / finger for PGP public key
> "Nada burra la chamaca." A.G.
> Any opinions expressed are my own; they do not represent my employer

There are two possible ways of doing this.

The first is to use the keyword_set function. This returns 1 if a variable
is defined, 0 otherwise. Use of this function to test for a variable being
defined is not recommended and is bad practice - it is meant to test for
the existence of a keyword in a function call, it happens to work.

The proper way is to use the size function. This returns a vector describing
the attributes of a variable. Unfortunately it is a variable length vector
which can make programming using it quite tedious. However, just to check
if a variable is defined is quite simple. The second element of the vector

is the data type of the variable, which is zero if the variable is undefined.

Thus, the code

```
IF (SIZE(variable))(1) EQ 0  THEN BEGIN
   PRINT,'Undefined'
ENDIF ELSE BEGIN
   PRINT.'defined'
ENDELSE
```

should tell you what you want to know.

```
 ----------------------------------------------------------- ------
Nigel Wade              |  E-mail     : nmw@ion.le.ac.uk
System Administrator         |
Ionospheric Physics Group    |  phone      : +44 (0)116 2523568
University of Leicester      |
Leicester, LE1 7RH, UK       |  fax.       : +44 (0)116 2523555
 ----------------------------------------------------------- -------
```

Subject: Re: How to see if variable is defined?
Posted by ps on Thu, 26 Jan 1995 17:47:30 GMT
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Mike Schienle (rep2857@sbsun0010.sbrc.hac.com) wrote:
: IDL> print, var
: % PRINT: Variable is undefined: VAR.
: % Execution halted at $MAIN$ (PRINT).
: IDL> print, size(var)
:   0   0   1

: The first parameter will be a zero if var is undefined.

!!NO

that's wrong:
```
IDL> i=1
IDL> print,size(i)
         0        2        1
IDL>
```

The *second* parameter has to be zero (exactly s(s(0)+1, which defines
the type of the variable)

  Peter

```
------------------  Peter 'PIT' Suetterlin  -----------------
| Kiepenheuer Institut    |  Sternfreunde Breisgau e.V   |
| fuer Sonnenphysik       |                |
| 0761/3198-210           |  0761/71571        |
-<ps@kis.uni-freiburg.de>-<suettpet@sun1.ruf.uni-freiburg.de>--
```

In article <3g8n7i$ghv@sun2.ruf.uni-freiburg.de> ps@kis.uni-freiburg.de (Peter Suetterlin) writes:
> Mike Schienle (rep2857@sbsun0010.sbrc.hac.com) wrote:
> : IDL> print, var
> : % PRINT: Variable is undefined: VAR.
> : % Execution halted at $MAIN$ (PRINT).
> : IDL> print, size(var)
> :   0   0   1
>
> : The first parameter will be a zero if var is undefined.
>
> !!NO
>
> that's wrong:
> IDL> i=1
> IDL> print,size(i)
>   0   2   1
> IDL>
>
> The *second* parameter has to be zero (exactly s(s(0)+1, which defines
> the type of the variable)

 I've noticed that this thread has survived longer than I would
anticipate from the subject. I have not been following it so, this may have
been pointed out already.

I use the following:

if(n_elements(var) eq 0) then print,'Variable is undefined'

This is much easier to remember and is less code than using SIZE.

--
 Joseph M. Zawodny   (KO4LW)   NASA Langley Research Center
 Internet: j.m.zawodny@larc.nasa.gov   MS-475, Hampton VA, 23681-0001
 TCP/IP: ko4lw@ko4lw.ampr.org Packet: ko4lw@n4hog.va.usa.na

Subject: Re: How to see if variable is defined?
Posted by thompson on Fri, 27 Jan 1995 14:49:00 GMT

nmw@ion.le.ac.uk (Nigel Wade) writes:

> In article 95Jan20094331@venice.water.ca.gov, rfinch@water.ca.gov (Ralph Finch) writes:
>> Is there a nice way of checking if a variable is defined?
>>
>> I have a widget_control command which removes a menu, and I need to
>> see if the menu is defined before destroying it.
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>> Ralph Finch 916-653-8268:voice 916-653-6077:fax
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> There are two possible ways of doing this.

> The first is to use the keyword_set function. This returns 1 if a variable
> is defined, 0 otherwise. ...

Not quite true. KEYWORD_SET returns 1 if a variable is defined AND IS NOT
ZERO!

Bill Thompson