
Subject: Re: Clever Where() test
Posted by [afl](#) on Wed, 24 May 1995 07:00:00 GMT
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In article <moleD93CEG.79n@netcom.com>, mole@netcom.com (Aaron Birenboim) writes:

```
> Is there a clever way to test for null return (-1) from WHERE???
```

```
>
```

```
> I'm doing stuff like :
```

```
>
```

```
>  i = WHERE(x GT 0.0)
```

```
>  s = SIZE(i)
```

```
>  IF s(0) EQ 0 THEN BEGIN
```

```
>    IF i GE 0 THEN BEGIN
```

```
>      ; do something with x(i)
```

```
>    ENDIF
```

```
>  ENDIF ELSE BEGIN
```

```
>    ; do something with the multiple elements x(i)
```

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>  ENDIF
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```
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```

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```

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> "do something...." code is often the same whether i is scalar or vector.
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```
>
```

```
> I wish that "IF i eq -1 THEN..." wouldnt crash for vector i's!!!
```

```
> --
```

How about this?

```
i = WHERE( x GT 0.0, count)
```

```
IF ( count gt 0 ) then 'do something with the x's
```

The count is very handy indeed. You could also build a loop from 0, count-1 if you needed to.

--

Andrew F. Loughe email: afl@cdc.noaa.gov
University of Colorado, CIRES voice: (303) 492-0707
Campus Box 449 fax: (303) 497-7013
Boulder, CO 80309-0449 USA

Subject: Re: Clever Where() test
Posted by [thompson](#) on Thu, 25 May 1995 07:00:00 GMT
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Paul Probert <probert@uwmfe.neep.wisc.edu> writes:

> IDL allows you to give a zero subscript to a scalar,
> so you can say:
> i=WHERE(...)
> IF i(0) EQ -1 THEN BEGIN
> ...
>
> One word of caution. If you have a scalar element of a structure,
> for some reason you can't do this:
> x={i:0,j:1}
> IF x.i(0) ... ;bombs
> But you can make it work with more parentheses:
> IF (x.i)(0) ... ;works
>
> Paul Probert
> University of Wisconsin

So does x(0).i

Bill Thompson

Subject: Re: Clever Where() test
Posted by [Paul Probert](#) on Thu, 25 May 1995 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

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Paul Probert
University of Wisconsin

Subject: Re: Clever Where() test
Posted by [thompson](#) on Thu, 25 May 1995 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

afl@cdc.noaa.gov (Andy Loughe) writes:

```

> In article <moleD93CEG.79n@netcom.com>, mole@netcom.com (Aaron Birenboim) writes:
> |> Is there a clever way to test for null return (-1) from WHERE???
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> |> I'm doing stuff like :
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> |>     ENDIF
> |>   ENDIF ELSE BEGIN
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> |>   ENDIF
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> |> "do something...." code is often the same whether i is scalar or vector.
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> |> I wish that "IF i eq -1 THEN..." wouldnt crash for vector i's!!!
> |> --

```

> How about this?

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> i = WHERE( x GT 0.0, count)
> IF ( count gt 0 ) then 'do something with the x's

```

> The count is very handy indeed. You could also build a
> loop from 0, count-1 if you needed to.

For that matter, one could also do

```

i = WHERE(x GT 0.0)
IF i(0) NE -1 THEN 'do something with the x's

```

although I also prefer using the optional count parameter. On the other hand,
if all one cared about was whether and matches were found, and didn't care
where they are, then one could do something like

```

IF (WHERE(x GT 0.0))(0) NE -1 THEN PRINT, 'At least one is > 0.0'

```

One can always reference a variable with (0), even if it's a scalar.

Bill Thompson

Subject: Re: Clever Where() test
Posted by [bertin](#) on Thu, 25 May 1995 07:00:00 GMT
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Andy Loughe (afl@cdc.noaa.gov) wrote:

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> IF ( count gt 0 ) then 'do something with the x's  
>  
> The count is very handy indeed. You could also build a  
> loop from 0, count-1 if you needed to.  
>  
> --
```

or this

```
IF i(0) EQ -1 THEN ...
```

Works for vector and scalar i's

Scott J. Bertin
bertin@euler.cpi.com

Subject: Re: Clever Where() test

Posted by [steinhh](#) on Fri, 26 May 1995 07:00:00 GMT

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In article <3q2tld\$8du@post.gsfc.nasa.gov>, thompson@orpheus.nascom.nasa.gov (William Thompson) writes:

|> Paul Probert <probert@uwmfe.neep.wisc.edu> writes:

|>

|> >IDL allows you to give a zero subscript to a scalar,

|> >so you can say:

|> > i=WHERE(...)

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|> > Paul Probert

|> > University of Wisconsin

|>

|> So does x(0).i

|>

|> Bill Thompson

|>

Just nit-picking: If the tag i in x.i is an array, only the (x.i)(0) notation works. This works if x and/or i are arrays (or scalars).

Stein Vidar

Subject: Re: Clever Where() test

Posted by [offenbrg](#) on Tue, 30 May 1995 07:00:00 GMT

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afl@cdc.noaa.gov (Andy Loughe) writes:

> In article <moleD93CEG.79n@netcom.com>, mole@netcom.com (Aaron Birenboim) writes:

> |> Is there a clever way to test for null return (-1) from WHERE???

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> |> "do something...." code is often the same whether i is scalar or vector.
> |>
> |> I wish that "IF i eq -1 THEN..." wouldnt crash for vector i's!!!
> |> --

```

There's another cute way:

```

i = WHERE(x GT 0.0)
IF (i(0) GE 0) THEN BEGIN
  blah blah
ENDIF

```

If "I" is a scalar, "I(0)" will still equal "I".

Joel

--

"...And I am unanimous in this." - Mrs. Slocumbe

Joel D. Offenbergs | offenbrg@fondue.gsfc.nasa.gov

Hughes STX, NASA/GSFC/LASP | (301)-286-5801

Subject: Re: Clever Where() test
 Posted by [thompson](#) on Tue, 30 May 1995 07:00:00 GMT
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steinhh@amon.uio.no (Stein Vidar Hagfors Haugan) writes:

```

> In article <3q2tld$8du@post.gsfc.nasa.gov>, thompson@orpheus.nascom.nasa.gov (William
Thompson) writes:
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> the (x.i)(0) notation works. This works if x and/or i are
> arrays (or scalars).
```

```
> Stein Vidar
```

```
Hi, Stein Vidar!
```

```
Even more nitty nit-picking: The post did say "a scalar element of a
structure". However, you're correct--Paul's way would work in either case.
```

```
Bill Thompson
```
