
Subject: Non-intuitive result with !Null in Where()

Posted by [Matthew Argall](#) on Wed, 21 Aug 2013 16:42:25 GMT

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

This is not what I expected. If there are no elements, how can "count" be non-zero? I was hoping that Where() would return !Null and "count" would be 0.

```
IDL> print, n_elements(!Null)
0
IDL> print, where(!Null ne 0, count)
0
IDL> print, count
1
IDL> print, where(!Null ne 0, count, /NULL)
0
IDL> print, count
1
IDL> print, !Null[0]
% Expression must be an array in this context: !NULL.
IDL> print, (!Null)[0]
% Variable is undefined: <UNDEFINED>.
```

The Where function is telling me I can access !Null at element 0, but I cannot.

```
IDL> print, !version
{ x86_64 darwin unix Mac OS X 8.0 Jun 17 2010    64    64}
```

Subject: Re: Non-intuitive result with !Null in Where()

Posted by [David Fanning](#) on Wed, 21 Aug 2013 16:48:56 GMT

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

Matthew Argall writes:

```
> The Where function is telling me I can access !Null at element 0, but I cannot.
>
> IDL> print, !version
> { x86_64 darwin unix Mac OS X 8.0 Jun 17 2010    64    64}
```

No, the Where function is telling you that !Null is not equal to 0 and there is 1 element where this is true in the comparison expression.

Seems perfectly reasonable to me.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Non-intuitive result with !Null in Where()
Posted by [Matthew Argall](#) on Wed, 21 Aug 2013 17:52:15 GMT
[View Forum Message](#) <> [Reply to Message](#)

> there is 1 element where this is true in the comparison expression.

Doh!

Subject: Re: Non-intuitive result with !Null in Where()
Posted by [Heinz Stege](#) on Wed, 21 Aug 2013 23:51:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wed, 21 Aug 2013 09:42:25 -0700 (PDT), Matthew Argall wrote:

> This is not what I expected. If there are no elements, how can "count" be non-zero? I was hoping that Where() would return !Null and "count" would be 0.

>

> IDL> print, n_elements(!Null)

> 0

> IDL> print, where(!Null ne 0, count)

> 0

> IDL> print, count

> 1

> IDL> print, where(!Null ne 0, count, /NULL)

> 0

> IDL> print, count

> 1

> IDL> print, !Null[0]

> % Expression must be an array in this context: !NULL.

> IDL> print, (!Null)[0]

> % Variable is undefined: <UNDEFINED>.

>

>

> The Where function is telling me I can access !Null at element 0, but I cannot.

>

This is not true. In your words, the Where function is telling you, that the expression !null ne 0 has one element, which is not equal 0.

And the position of this element is 0.

```
IDL> expr=!null ne 0
```

```
IDL> help,expr[0]
```

```
<Expression>  BYTE    =  1
```

Heinz
