Subject: Is the sky falling?
Posted by Helder Marchetto on Wed, 15 Jan 2014 13:20:39 GMT
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Hi,
I couldn't find any reference to explain this, so here is probably the typical beginners post.
Why is does the INTARR(3,3)+1 expression result in a LONG array?

IDL> HELP, INTARR(3,3)+1
<Expression>   LONG   = Array[3, 3]

Shouldn't it be an integer array?

On the other hand:

IDL> HELP, INTARR(3,3)+1b
<Expression>   INT   = Array[3, 3]

results in an integer array...

Where is the trick?

Regards,
Helder

Subject: Re: Is the sky falling?
Posted by Moritz Fischer on Wed, 15 Jan 2014 13:30:26 GMT
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With IDL 8.2.3 on Solaris and 8.1 on Windows I get INTs in either case.
Have you tried INTARR(3,3) + 1S ?

Am 15.01.2014 14:20, schrieb Helder:
> Hi, I couldn't find any reference to explain this, so here is
> probably the typical beginners post. Why is does the INTARR(3,3)+1
> expression result in a LONG array?
>
> IDL> HELP, INTARR(3,3)+1 <Expression>   LONG   = Array[3, 3]
>
> Shouldn't it be an integer array?
>
> On the other hand:
>
> IDL> HELP, INTARR(3,3)+1b <Expression>   INT   = Array[3, 3]
>
> results in an integer array...

>
> Where is the trick?
>
> Regards, Helder
>

Subject: Re: Is the sky falling?
Posted by Matthew Argall on Wed, 15 Jan 2014 13:34:54 GMT
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> Why is does the INTARR(3,3)+1 expression result in a LONG array?

Check to see f "1" is a long integer by typing.

IDL> help, 1

If it is, maybe there is a "compile_opt" somewhere.

Subject: Re: Is the sky falling?
Posted by David Fanning on Wed, 15 Jan 2014 13:41:14 GMT
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Helder writes:

> I couldn't find any reference to explain this, so here is probably the typical beginners post.
> Why is does the INTARR(3,3)+1 expression result in a LONG array?
>
> IDL> HELP, INTARR(3,3)+1
> <Expression>   LONG   = Array[3, 3]
>
> Shouldn't it be an integer array?

I certainly get integers. Are you sure you don't have the INT32 compiler
option on?

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: Is the sky falling?
Posted by Helder Marchetto on Wed, 15 Jan 2014 13:44:34 GMT
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On Wednesday, January 15, 2014 2:34:54 PM UTC+1, Matthew Argall wrote:
>> Why is does the INTARR(3,3)+1 expression result in a LONG array?
>
>
>
> Check to see f "1" is a long integer by typing.
>
>
>
> IDL> help, 1
>
>
>
> If it is, maybe there is a "compile_opt" somewhere.

Hi,
thanks for the answers.
Here is my situation:

```
IDL> !VERSION
{
   ARCH: "x86_64",
   OS: "Win32",
   OS_FAMILY: "Windows",
   OS_NAME: "Microsoft Windows",
   RELEASE: "8.3",
   BUILD_DATE: "Nov 15 2013",
   MEMORY_BITS: 64,
   FILE_OFFSET_BITS: 64
}
IDL> HELP, 1
<Expression>    INT       =        1
IDL> HELP, INTARR(3,3) + 1S
<Expression>    INT       = Array[3, 3]
```

Ok,
it seems like Compile_opt is making this. I just noticed that I got this result while debugging through some code where the "Compile_Opt idl2" option was used.
This clears things out. From the IDL help:
"DEFINT32 — IDL should assume that lexical integer constants default to the 32-bit type rather than the usual default of 16-bit integers..."

My error. I forgot that
1) I was debugging
2) Compile_opt idl2 was on
3) That idl2 makes 32-bit default integers

Thanks for pointing this out.

Cheers,
h