
Subject: Re: loop limit ???

Posted by [mmeron](#) on Wed, 18 Apr 2007 22:28:08 GMT

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In article <1176929681.182929.291930@q75g2000hsh.googlegroups.com>, kostis <kostiskaz@gmail.com> writes:

```
> i wouldnt expect that IDL has a limit for loops !!
> trying a loop of 50.000 steps i got the message:
>
> % Compiled module: TRAJECTORY.
> % Loop limit expression too large for loop variable type.
> <LONG ( 49999)>.
> % Execution halted at: TRAJECTORY      16 /home/kostis/PROJECT
> LARMOR/dipole/trajectory.pro
> %          $MAIN$
>
> Why is this?
> This means i cant have bigger loops... or is there a trick??
>
```

You can have much larger loops, just be careful about the indexing.
In the expression

```
for i = a, b do ....
```

the type of the loop variable is determined by the type of a
(regardless of what b is). So, if you write

```
for i = 0, 50000
```

or even

```
for i = 0l, 50000l
```

the loop variable will be a standard (aka "short") integer and these
are limited to $2^{15} - 1$, i.e. 32767. But if you'll write

```
for i = 0l, 50000
```

the loop variable is of type LONG and the limit is at $2^{31} - 1$, more
than 2 billion. If that's not enough you can use LONG64, at which
point it'll probably be the longevity of the computer that'll
determine the limit

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"
