Subject: Re: fast for loop

Posted by JD Smith on Mon, 11 Jun 2007 19:00:36 GMT

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On Mon, 11 Jun 2007 07:01:36 -0700, Conor wrote:

- > On Jun 10, 10:55 pm, David Fanning <n...@dfanning.com> wrote:
- >> airy.ji...@gmail.com writes:
- >>> Sometimes we could use some special function to avoid them. Sometimes
- >>> we could use more lines of code to avoid them.
- >>> There are many skills to make the program more efficient and fast.But
- >>> in fact loops are ineluctable, the key is how
- >>> to use it.
- >>> Anyway,I agree with you ,Mark.IDL indeed need to improve its
- >>> efficiency on the loops and some arithmatic computing.IDL6.4
- >>> shows a lot of features which can be proved thier hard working for
- >>> it.At least 50% elevation of the drawing speed and new
- >>> OpenGL Object indicates an nice future of the IDL.It's wothy for us to
- >>> waiting new edtion of the IDL which can give us some
- >>> fast loops,^_^.

>>

>> Yeah, and life would be more interesting if pigs could fly.

>>

- >> If fast loops are what you were after, I'd guess you would
- >> design a language that looked very much like C or FORTRAN.
- >> IDL is something different and I don't see much point wishing
- >> it wasn't.
- > Granted, it would be nice to have fast for loops (for those times
- > where you really just have to use one). However, I do also enjoy the
- > challenge of having to come up with fun new ways to avoid them.
- > There's nothing more satisfying than taking a couple lines of code
- > wrapped inside a for loop and turning it into one line of convoluted
- > array operations. Normally I have no artistic talen what-so-ever, so
- > coming up with confusing idl code in order to avoid for loops is my
- > way of expressing my creative talents:)

It's funny because it's true. Some of the tricks we resort to to get good performance out of IDL fall in the category of elegant. Most do not. I've long advocated a specially compiled for loop which drops essentially all the features of the IDL interpreter, which no doubt are what make a single round trip through the for loop so slow (warning: this is informed speculation). This "optimized side loop", which might get enabled with a compiler flag, would have some inherent inflexibility, but should offer much better performance.

JD