Subject: Re: Multithreading in IDL

Posted by Marc Reinig on Tue, 26 Jul 2005 14:25:27 GMT

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- > IDL itself can be set to run multithread even on a single processor
- > system. Simply run CPU, TPOOL_NTHREADS = NumThreads and you're set.

>

- > So far my experience says that on Linux there'll be a process for each
- > thread and on Windows all I could get was a single process, no matter
- > what maybe I'm doing something wrong, but my guess is that is the way
- > multithreading works on Windows (note that I neither own a SMP system
- > nor have access to one).

On Windows, processes are ~the equivalent of a program that you run. The process can, in turn, have multiple threads. They all share the same address space and resources. They can also run simultaneously on multiple processors.

IDL supports multiple threads internally on Windows for some operations. FFT is one. We have an 8 processor machine. When it hits the FFT's all 8 come alive. When it goes back to regular code, only one is active. There are probably some Matrix operations that are also multi threaded.

You can do your own multi threading using a DLM to spawn separate threads in Windows, but I haven't done it to use IDL functions.

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