Subject: Re: Parallel Processing in IDL
Posted by Michael Galloy on Mon, 11 Oct 2010 20:01:58 GMT
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On 10/11/10 12:06 PM, Ammar Yusuf wrote:
> Well let's say I have a for loop and inside this for loop I have
> around 50-100 lines and these computations are going out to different
> procedures and functions. Would I still use the IDL Thread Pool?
> Thanks!

The thread pool automatically detects and uses multiple CPUs for vector operations and particular routines (listed below). So there is no way to control how work is sent to the various processors. You can control a few parameters via the CPU routine.

Table 12.2. Thread aware mathematical routines
ACOS ALOG10 ALOG
CONJ COS COSH FINITE FLOOR GAMMA
ASIN ERRORF GAUSSINT ROUND
ATAN EXP IMAGINARY SIN TVSCL
FINDGEN UINDGEN FLOAT
ABS CEIL EXPINT ISHFT
LNGAMMA MATRIX_MULTIPLY PRODUCT SINH SQRT TAN TANH VOIGT

Table 12.3. Thread aware image processing routines
BYTSCL CONVOL FFT

Table 12.4. Thread aware array creation routines
INTERPOLATE DCINDGEN MAKE_ARRAY DOUBLE ULONG
POLY_2D DCOMPLEXARR REPLICATE FIX ULONG64
BINDGEN INDGEN ULINDGEN
BYTARR CINDGEN LINDGEN L64INDGEN
UL64INDGEN

Table 12.5. Thread aware data type conversion routines
BYTE COMPLEX DCOMPLEX LONG LONG64 UINT

Table 12.6. Thread aware array manipulation routines
MAX MIN REPLICATE_INPLACE TOTAL WHERE

Table 12.7. Thread aware programming and IDL control routines
BYTEORDER LOGICAL_AND LOGICAL_OR LOGICAL_TRUE

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