
Subject: Passing an array from IDL to MPI

Posted by [Miska Le Louarn](#) on Mon, 14 Jan 2002 07:47:50 GMT

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Hi all IDL / parallel computing experts !

I am trying to integrate a piece of MPI-code written in C into my IDL program.

I have a cube of data produced in the IDL code, which needs to be Fourier transformed. So I want to write a little MPI program (in C) which uses several CPUs to compute the FFT of each plane in the cube. My problem is that I need to pass the data cube to the MPI program. This would not a problem with a plain C program (a simple call_external would do the trick), but MPI likes to be launched with the "mpirun" command which initializes all the parallel stuff.

Any ideas ?

Of course I could write the data cube to a file from IDL. I could then spawn the mpirun process from IDL and have the MPI code read the file. But I think there is a significant loss of time doing that. Plus it's not very elegant...

I hope someone has an idea...

Thanks in advance !

Miska

PS: I am using MPICH under Linux. The C code uses FFTW.

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