Subject: Re: netCDF-4 support in IDL?
Posted by George White on Sat, 04 Apr 2009 18:35:26 GMT
View Forum Message <> Reply to Message

On Fri, 3 Apr 2009, Paul van Delst wrote:

> Do any insiders out there know about the status of future support for
> netCDF-4 in IDL? I received third/fourth-hand news yesterday that there are
> no plans for IDL to support netCDF-4 and I wanted to get some more scoop
> before contacting ITTVIS directly. I searched the ng on google but didn't
> find anything.

I'm not an insider, but I was at the HDF meeting in Denver last fall where there was considerable discussion about support for HDF-5 and netCDF-4 support in commercial packages (IDL, Matlab, etc.). The problem is that netCDF-4 depends on HDF-5, which has a very big API that so far defies attempts to automate the task of writing wrappers for other languages.

Commercial developers have no way to predict which parts of the API are needed by user A, so they have no choice but to implement most of the API. Meanwhile, open source (R, octave, gdl, ...) users have been writing wrappers for the parts of the API needed for their work. So at present, octave allows you to save vars to hdf5, but R won't read the file if one of the variables is a range/sequence.

Add to this the issues that some hdf5 users are writing 64-bit programs, so we have a 64-bit hdf5 library that lets us build program X, but need to use the data in a program that uses a different library for which we don't have the 64-bit version, so in the end one has to dump data in some binary file using the 64-bit library and then read it into your 32-bit application.

I recommend that people start playing with hdf-5 and then netCDF-4 using gdl with the goal of working out the subsets of the API's needed to use some important data sets. Then, rather than asking ITTVIS to implement all of hdf-5+netCDF-4, just ask for the parts of the API's you need now.

--
George White <aa056@chebucto.ns.ca> <gnw3@acm.org>
189 Parklea Dr., Head of St. Margarets Bay, Nova Scotia B3Z 2G6