Subject: Bugs in IDL HDF routines
Posted by rivers on Mon, 09 Oct 1995 07:00:00 GMT

I have found a number of serious bugs in IDL's HDF routines. I have informed
RSI about these, but I am posting them here for 2 reasons:

- To prevent others from wasting time tracking down and document these same
  bugs.

- To solicit reports of any other bugs other poeple have found in the HDF
  routines so that RSI can fix them all at once.

1) Routine HDF_VG_ADDTR does not work at all. It always generates an error.
   This routine is used to add various entities (SDS, other Vgroups, etc.) to a
   Vgroup.

2) Routine HDF_SD_IDTOREF() is not documented. It is required to be able to
   use HDF_VG_ADDTR.

3) Routine HDF_SD_GETDATA crashes IDL when reading an SDS whose data type is
   DFNT_CHAR8. The technical support people at NCSA have stated that
   DFNT_CHAR8 is a valid data type for an SDS.

4) Routine HDF_SD_ATTRINFO returns corrupted strings when the attribute is of
   type DFNT_CHAR8 (character data). The returned strings have a trailing NULL
   character which renders them useless in IDL programs.

5) An error occurs under the following conditions:
    - Create a Scientific Data Set with HDF_SD_CREATE, specifying a data type.
    - Write data to that SDS with HDF_SD_ADDDATA, but pass it an array of a
      different data type than that specified in HDF_SD_CREATE.
    - HDF_SD_ADDDATA appears to work, but the error message
         % Temporary variables are still checked out - cleaning up...
      occurs when HDF_SD_END is called.

_____

Mark Rivers	(312) 702-2279 (office)
CARS	(312) 702-9951 (secretary)
Univ. of Chicago	(312) 702-5454 (FAX)
5640 S. Ellis Ave.	(708) 922-0499 (home)
Chicago, IL 60637	rivers@cars3.uchicago.edu (Internet)