Subject: HDF routines cause coredump Posted by James Theiler on Fri, 10 Jan 1997 08:00:00 GMT View Forum Message <> Reply to Message

Hello,

I've been having a devil of a time trying to use IDL's HDF functions. Any general advice would be appreciated, but the main purpose of this post is to provide an example of code that causes IDL to coredump. I am still not sure exactly what is causing the coredumps, since IDL graciously waited until the code was fairly extensive to start this egregious behavior, but I may have isolated the problem to the HDF_SD_SETEXTFILE function.

The following is an example of a small routine that causes IDL to coredump; I'm pretty sure it's legal code -- it is practically copied from the IDL Reference Guide (V 4, March '95, 1-422) -- but even if it weren't, I'd still prefer an error message to a coredump. In this case, the coredump is caused by an interaction with 'stop', but I don't know if that's the whole story.

It dumps core on my Sun4, but merely causes an error on the IRIX. When the 'stop' is not invoked (by not using the '/coredump' keyword when running this example), it seems to be okay.

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====== Here is an example session:
IDL> core_dump_sun
% Compiled module: CORE DUMP SUN.
ok
IDL> core_dump_sun,/coredump
% Stop encountered: CORE DUMP SUN
                                         12 core dump sun.pro
IDL> .con
/n/vendor/bin/idl: 9847 Memory fault - core dumped
======= and here is the code:
PRO core_dump_sun,coredump=coredump
  ;; if the '/coredump' keyword is set, then it
  ;; core dumps on the Sun4 (but not on IRIX)
  sd_id = HDF_SD_START('a.hdf',/create)
  sds_id = HDF_SD_CREATE(sd_id,'a',[3,5],/float)
  HDF_SD_ENDACCESS, sds_id
  sds_id = HDF_SD_SELECT(sd_id, 0)
```

if keyword set(coredump) then stop

```
;; here is where the coredump occurs,
;; right after the user types '.con'
;; at the IDL> prompt
HDF_SD_SETEXTFILE, sds_id, 'a.hxt'

;; cleanup (if we ever get here...)
HDF_SD_ENDACCESS, sds_id
HDF_SD_END,sd_id

print,"ok"
END
```

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