liziola@ucsu.Colorado.EDU (Luis E. Liziola) writes:

> Is it possible to read/write data from/to the 8mm TAPE EXABYTE inside IDL ?

> I know there are some routines like:
> TAPRD , TAPWRT , REWIND, SKIPF, etc etc but these work only for
> VMS enviromental

I have created IDL emulations for these VMS commands, so that one can use them
on Unix systems. They can be found on the anonymous ftp server
idlastro.gsfc.nasa.gov in the directory /pro/tape_io. (Those with
HTML-sensitive news readers can click <A HREF="ftp://idlastro/pro/tape_io">
here</A>.) The following README file (which unfortunately does not appear to
be on that server) explains this software.

Bill Thompson

   CDS/SERTS Unix Tape Utilities
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    Last Modified: 15 June 1994

The procedures in this directory are intended to emulate in Unix the intrinsic
tape routines available in the VMS version of IDL. The following routines are
available:

 REWIND Rewinds the tape
 SKIPF Skips files or records
 TAPRD Reads tape blocks
 TAPWRT Writes tape blocks
 WEOF Writes an End-of-file mark

In addition, there is the routine CHECK_TAPE_DRV which is an internal routine
used by the other routines.

Also, the routine DISMOUNT emulates the Unix command of that name. Although
this is not a standard IDL function, it is available as separate LINKIMAGE
software for VMS. The Unix equivalent closes the file unit open on the tape
drive, and optionally unloads the tape. Errors can result if the tape is
unloaded manually instead of using DISMOUNT.

These procedures are intended to emulate their VMS equivalents as closely as

possible, so that software can be written which is portable between VMS and Unix platforms. Towards that end, it was decided to reference tape drives by number as is done in VMS.

In VMS, the tape drive numbers 0-9 translate into names "MT0", "MT1", etc. These can be associated with actual tape drives through the use of logical names, e.g.

 $ DEFINE MT0 1MUA0

In Unix, with this software, the same thing is done, except that environment variables are used in place of logical names, e.g.

 > setenv MT0 /dev/nrst0

As always in Unix, case is important. Thus, if the above environment variable is set, then when the software refers to tape 0, the tape drive /dev/nrst0 is used.

This software requires IDL version 3.1 or later.

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Directory: /disk1/local/cds/util/tape/

CHECK_TAPE_DRV   - Associates tape drive numbers with device files. *Unix only*
DISMOUNT   - Emulates the VMS DISMOUNT function in Unix.
REWIND   - Emulates the VMS REWIND function in Unix.
SKIPF   - Emulates the VMS SKIPF function on UNIX machines.
TAPRD   - Emulates VMS TAPRD procedure on UNIX machines.
TAPWRT   - Emulates VMS TAPWRT procedure on UNIX machines.
WEOF   - Emulates the VMS WEOF routine on UNIX machines.