
Subject: Re: open,/record - classification

Posted by [thompson](#) on Mon, 16 Nov 1992 23:22:00 GMT

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In article <1992Nov16.152127.17585@newsserver.rrzn.uni-hannover.de>, knipp@ipi.uni-hannover.de writes...

> Hello there,

>

> We're runnig Pv~Wave Cl. 4.0 under SunOs 4.1.2

>

> There are 2 questions :

>

> a) Has anybody ever tried to open a device (p.e. a streamer-tape)

> for record-wise reading/writing ?. It should work under VMS, but we must do it

> under UNIX.

>

> b) Is there anybody who has programmed a land-use-classification in

> WAVE (or knows about an existing one) ?

>

> Thanks, KK

My experience is with IDL, not PV-WAVE, but this should still hold true. You can open a tape device in Unix and do I/O using READU and WRITEU. At least I was able to do this with an Exabyte tape drive on a Sun. You can also spawn out to the OS to send commands such as

```
mt -f /dev/nrst1 fsf 1
```

or

```
mt -f /dev/nrst1 rewind
```

As I recalled, I just opened the device with the command

```
OPENU, UNIT, '/dev/nrst1'
```

I didn't use any keywords.

At one time I tried to write IDL procedures for Unix that imitated as closely as possible the VMS tape utilities: TAPRD, TAPWRT, etc. I stopped working on it, though, when I realized that there was no way to obtain the actual number of bytes read in, as one could with the VMS routines. One place that was crucial for us was in reading FITS tapes--we needed to be able to tell if the tape was written using 2880 byte or 28800 byte records.

Bill Thompson

Subject: Re: open,/record - classification
Posted by [knipp](#) on Wed, 25 Nov 1992 11:01:07 GMT
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William Thompson (thompson@stars.gsfc.nasa.gov (William Thompson, code 682.1, x2040)
writes ...

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> crucial for us was in reading FITS tapes--we needed to be able to tell if the
> tape was written using 2880 byte or 28800 byte records.
>
> Bill Thompson

Dear Bill,
thank you for your answer.

I've tried OPENU together with READU/WRITEU. It worked perfectly well
for records up to ~ 1000 bytes long.

Unfortunately it did NOT with larger record-lengths (say 10000, 16000 or
even 19000 bytes long - which I have to deal with).

If anybody could help me to overcome this problem (without spawning
a command like 'dd' to the OS) I'll be very grateful.

Regarding your problem (2880 or 28800 byte records) :
Have you tried the UNIX-command 'tcopy' ?

K.Knipp
(Does nobody know something about classification in WAVE ?)

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