Subject: cross platform i/o problem
Posted by mbastian on Fri, 01 Mar 1996 08:00:00 GMT
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Hi Peter

I transfer binary back and forth between vax's and unicies all the time.

It is not clear to me if you are using formated or unformated reads/writes.

For binary files the vax fortran i/o places a two byte record delimeter at
the start of each record (0x3). Prepend these two each unformated write and
your problems should go away.

I have a few C #define to do all this for me when I want to produce unformated
fortran binary files in c.

the following is not particularly pretty but hey this is VMS after all !!!

```
#if defined (unix)
#define BINARY_EXTENSIONS
#define FREAD(a,b,c,d)   fread (a,b,c,d)
#define FWRITE(a,b,c,d)   fwrite (a,b,c,d)
#else
#include <stdlib.h>
#define BINARY_EXTENSIONS  ,"rfm=var"
#define FREAD(a,b,c,d)   { \
        int z;        \
        char * ptr_1 , * ptr_2;     \
        ptr_1 = malloc ( b + 2 );    \
        ptr_2 = ( char * ) a;     \
        for ( z = 0 ; z < c ; z ++ ) {   \
         fread ( ptr_1 , b + 2 , 1 , d ); \
         memmove ( ptr_2 , ptr_1 + 2 , b ); \
         ptr_2 += b;       \
        }         \
        free ( ptr_1 );       \
       }
#define FWRITE(a,b,c,d)   { \
        int z;        \
        char * ptr_1 , * ptr_2;     \
        ptr_1 = malloc ( b + 2 );    \
        * ( short * ) ptr_1 = 0x3;    \
        ptr_2 = ( char * ) a;     \
        for ( z = 0 ; z < c ; z ++ ) {   \
         memmove ( ptr_1 + 2 , ptr_2 , b ); \
         fwrite ( ptr_1 , b + 2 , 1 , d ); \
         ptr_2 += b;       \
```

```
        }         \
        free ( ptr_1 );       \
       }
#endif

/* open data file */

if (( fd = fopen ( file , "rb" BINARY_EXTENSIONS)) == NULL ) {
 fprintf ( stderr , "Could not open in file %s\n" , file );
 exit ( -1 );
}
```

Hope this helps ...

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