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Submitter :
Language : VAX Fortran

Library: KERNLIB, VAX only
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VAX Fortran Interface for Reading and Writing 'Foreign' Tapes

VAXTIO handles non-native tapes on the VAX; it is needed because VAX Fortran does not provide a U format.

If the tape to be handled is on logical unit 11, mounted on MTA0, with physical records of 3600 bytes maximum, for example, the following commands have to be given:

```
$ MOUNT MTA0:/FOREIGN/BLOCKSIZE=3600/RECORDSIZE=3600
$ ASSIGN MTA0: QIOUNIT11
```

Structure:

SUBROUTINE subprogram
User Entry Names: VAXTIO
Internal Entry Names: WAIT2S
Files Referenced: User defined parameter
COMMON Block Names and Lengths: /VAXTIO/ 240

Usage:

```
CALL VAXTIO(LUN,MODOP,IBUF,NDO,NDONE,NCODE,LUNMSG)
```

Input parameters:

LUN	Logical unit number (0 < LUN < 61).
MODOP	Operation mode, indicating the kind of operation to be performed; for details, see below.
IBUF	Data area for read and write.
NDO	Number of units to be done.
LUNMSG	Fortran logical unit number for printing diagnostic messages; if zero, printing is suppressed.

Output parameters:

NDONE	Number of units done; error if negative.
NCODE	QIO System status code.

The following operations are provided at present:

MODOP = −2 : Write EOF (3 tape marks are written and the tape is positioned after the first tape mark).

NDONE = 1	Successful.
NDONE = 0	End-of-tape.
NDONE = −7	Trouble.

MODOP = −1 : Write one record, tranfer NDO bytes from IBUF to tape.

NDONE > 1	Number of bytes written.
NDONE = 0	End-of-tape, but record written.
NDONE = −7	Trouble.

MODOP = 0 :	Read one record, transfer at most NDO bytes from tape to IBUF, excess data are lost.	
	NDONE $>$ 0	Number of bytes transferred.
	NDONE $=$ 0	EOF, end-of-tape.
	NDONE $= -1$	Read error, record skipped.
	NDONE $= -7$	Trouble.
MODOP = 1 :	Assign a channel for logical unit (if not done explicitly, assignment occurs on first contact).	
	NDONE $=$ 1	Successful.
	NDONE $=$ 0	Channel already assigned.
	NDONE $= -7$	Trouble.
MODOP = 2 :	Skip |NDO| records, forward if NDO $>$ 0, reverse if NDO $<$ 0. (|NDO| $<$ 32768)	
	NDONE $>$ 0	Number of records skipped.
	NDONE $<$ NDO	EOF seen, skipped, counted.
	NDONE $= -7$	Trouble.
MODOP = 3 :	Skip |NDO| files, forward if NDO $>$ 0, reverse if NDO $<$ 0.	
	NDONE $>$ 0	Number of files skipped.
	NDONE $<$ NDO	End-of-tape seen.
	NDONE $= -7$	Trouble.
MODOP = 4 :	Rewind.	
MODOP = 5 :	Rewind and unload.	
	NDONE $=$ 1	Successful.
	NDONE $= -7$	Trouble.
MODOP = 6 :	De-assign channel; this should be done if a logical unit is no longer needed.	
	NDONE $=$ 1	Successful.
	NDONE $= -7$	Trouble.

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