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PROGRAM LIBRARY

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TITLE	MAP DIRECTORY INFORMATION ON KV8/I
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MAP DIRECTORY INFORMATION ON KV8/I

DECUS Program Library Write-up DECUS No. 8-378

ABSTRACT

KV8MAP is a system program that could replace INDEX in the TCØ1 Dectape Library System. INDEX furnishes the operator with only the file names from the directory. KV8MAP gives the operator a complete picture of the directory including file name, starting block on tape, number of blocks in file, starting address of the program and a complete description of the core locations used by each file. Output is on the KV8/I.

REQUIREMENTS

Storage

The program is stored between locations 6ØØØ and 7577 octal and requires 7 blocks on dectape.

Equipment

A PDP8/I computer with a KV8/I display and at least one TU55 tape drive with a TCØ1 controller.

USAGE

Loading

KV8MAP may be loaded anywhere on a Dectape Library System magnetic tape. However, updating KV8MAP directly after the GETSYS program will guarantee the fastest execution time.

The binary tape is loaded in memory through the binary loader and then the system is updated as follows:

```
PROGRAM NAME              : KV8MAP
STARTING ADDRESS          : 62ØØ
CORE LOCATION(S)          :<6ØØØ, 7577>;
```

Calling Sequence

The program is called through the Dectape Library System by typing KV8MAP after the TCØ1 bootstrap loader has been started or at any time the system is monitoring the teletype.

Switch Settings

None

Start-up

The program is started automatically when called from the dectape at location 62ØØ. Program may be restarted at location 62ØØ.

The program will halt after execution and if "Continue" is depressed the TCØ1 Library System will be loaded. This HLT (location 6132) may be replaced by a NOP.

DESCRIPTION

Discussion

This program makes use of all the information available on the TCØ1 Library System Directory except the first four words of the table. Each entry is stored in the following manner in the directory:

Ø1Ø2	)	2 ascii characters stripped to 6 bits
Ø3Ø4	)	contained by 3 first words
Ø5ØØ	)	spell out the file name "ABCDE"
ØØ76		file's first block number
7667		S.A. of program in file
xxxx		core locations as described below
xxxx		
ØØØØ		end of file entry

Core locations specification words:

In single page entries bits Ø and 1 are Ø.

Bits 2 to 6 specify memory page +1.

Bits 7 to 11 = Ø if no more specifications exist for the file or if next core specification is multipage. If next core specification is singlepage, bits 7 to 11 specify the memory page +1.

In multipage entries, bits Ø and 1 = 1. Bits 2 to 6 specify the first page +1 of the group of pages and bits 7 to 11 specify the last page +1 of the group.

The only exceptions to this convention are INDEX, binary files and ASCII files. Binary files stored by XPAL (part of DECUS-8-64) appear to have a core specification of (ØØØØ, 7577). ASCII files stored by XEDIT and XPAL appear to have core specifications of (74ØØ, 7577).

DIAGRAM

Flow Chart

See following page.

KV8MAP FLOW CHART