



# DECUS

## PROGRAM LIBRARY

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| DECUS NO.       | 8-473   |
| TITLE           | THREE UTILITY ROUTINES FOR PS/8<br>1. DTA and DECLAB<br>2. CHANGE and REMOVE<br>3. LIST |
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| SOURCE LANGUAGE | PAL-8   |

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DTA and DECLAB - Automatic assignment of user device names to DECTapes.

Under the PS/8 Programming System an internal label may be recorded in block 0 of any DECTape (other than a DECTape system tape). This is then read and placed in the USER DEVICE NAME TABLE whenever the tape is mounted, reducing error in transferring files to the wrong tape, and providing automatic recognition of the presence of a particular tape.

Two programs are necessary to provide this function. The program DECLAB is provided to record the label record in block 0 of a DECTape, while the program DTA is run when a tape is mounted. This program checks to see which units are in REMOTE, and reads the label of each tape, making proper adjustments to the User Device Name Table.

Loading instructions:

```
.R ABSLDR
*PTR:=12000$(alt mode)
.SAVE SYS DTA
```

```
.R ABSLDR
*PTR:$(alt mode)
.SAVE SYS DECLAB
```

Operating instructions:

Each time DECTapes are mounted, type

```
.R DTA
```

A printout of the status of all DECTape units will be provided, with one of the following three messages for each unit in the REMOTE position.

DTAn xx

Tape xx is mounted on DECTape unit n, assignment made.

DTAn UNLABELED

The tape on unit n does not have a label record.

DTAn xx IS DUP NAME, NOT ASSIGNED

The device xx already exists elsewhere.

In order to place a label on a DECTape, the program DECLAB is used.

```
.R DECLAB
```

```
*DTAn:<
```

```
#ØLABEL'__'xx (followed by any additional information, then ↑Z).
```

The format of the label record is fixed through the last character of the label. ' ' indicates a blank. If an error is made, type ↑Z to record the bad label, then retry. If the device is write-locked, the program will continue to attempt to write until a ↑C is typed.

Since the monitor bootstrap resides in block 0 of a DECTape system tape, a test is made to see if the label may be recorded prior to allowing it to be written. If file storage begins in block 7, the # is typed and the label may be recorded. Otherwise, the program returns to the command decoder.

Restrictions:

This program is dependent upon the 6 November 1970 format of the User Device Name Table. Subsequent releases of PS/8 may or may not change the operation of this program.

CHANGE and REMOVE pseudo-commands for PS/8 system.

Loading instructions:

```
.R ABSLDR
*PTR:=2000$(alt mode key)
.SAVE SYS CHANGE
```

```
.R ABSLDR
*PTR:=2000$(alt mode key)
.SAVE SYS REMOVE
```

Operating instructions:

The syntax for the use of the CHANGE command is as follows:

```
.R CHANGE <dev:>file1.e1 TO file2.e2
```

The device specification is optional; the default device is SYS.

Example:

```
.R CHANGE PRG.SV TO OLDPRG.SV
CHANGED
```

```
.R CHANGE DTA3:PRG.SV TO PRG.SV
```

Note that the device is specified only once.

```
CHANGED
```

Error messages:

```
dev DOES NOT EXIST
```

is typed if a device which does not exist has been requested.

```
file.ex NOT CHANGED, NOT ON dev
```

is typed if there is no file by that name on the specified device.

```
file.ex NOT CHANGED, DUP FILE
```

is typed if an attempt is made to change a filename to one already in the directory.

The syntax for the use of the REMOVE command is as follows:

```
.R REMOVE <dev:>files,<dev:>files,...
```

The device, if specified, continues until a new device is specified.

If no device is specified, the default is SYS.

Example:

```
.R REMOVE FUNCA.RL,CHISQU.SV
```

```
.R REMOVE DTA2:FILA.PA,FILA.BN,DTA5:REMS.SB,REMS.RL
```

Error messages:

```
file.ex NOT REMOVED, NOT ON dev
```

is typed if the file does not exist on the specified device;

the program continues to remove the rest of the files specified.

```
dev DOES NOT EXIST, REMOVAL TERMINATED
```

is typed if a device which does not exist has been specified;

the program removes only those files specified to the left of the bad device.

Restrictions:

These programs are designed to operate under the 6 November 1970 release of the PS/8 system. They use routines left in core after the program is loaded, which may or may not be affected by subsequent releases of PS/8.

Note:

Users who are used to the PDP-10 operating system may wish to change to the names RENAME and DELETE, rather than CHANGE and REMOVE. This in no way affects the operation of the programs.

LIST - Program to list PS/8 directories on KV8/I scope.

Loading instructions:

Place paper tape in paper tape reader, type:

```
.R ABSLDR
*PTR:=2200$↑
.SAVE SYS LIST
```

Operating instructions:

To list the directory of the device SYS: type

```
.R LIST
```

To list the directory of any other device, type

```
.R LIST dev
```

Example:

```
.R LIST DTA2
```

Up to three columns of directory information may be listed at one time.

Restrictions:

EAE was used to perform the octal to decimal conversion.

This routine and a print routine which uses the shift instruction could easily be rewritten.

The routine to return the device specified in the R command is dependent upon the 6 November 1970 release of PS/8. Future releases may or may not affect the operation of this program.

Note:

Users who are used to the PDP-10 operating system may wish to change the name of the program to DIR (or DIRECT). This will in no way affect the operation of the program.

