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TITLE	ADDINDX (LAP6-DIAL-MS INDEX MANIPULATOR)
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ADDINDEX (LAP6-DIAL-MS INDEX MANIPULATOR)

DECUS Program Library Write-up

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Introduction: The ability to reserve space on LINCtapes is frequently of value. Situations often arise, however, in which DIAL cannot be used directly to prepare index entries.

LINCtapes for the PDP-12 are often marked with 1600 blocks so as to use all available space. DIAL, however, will not utilize the upper tape area. Access to this upper area may be achieved by PIP, and, therefore, the area is frequently used for storage of source programs. Index entries for programs in this area are of value to obviate the necessity for elaborate record-keeping.

Other circumstances of the need for direct access to the DIAL index include the storage of data or programs prepared under other systems. Here, index entries are needed to prevent DIAL from writing over the material.

ADDINDEX provides a simple and direct means of preparing needed index entries.

Program Overview: ADDINDEX is essentially a handler for MILDRED (DEC-12-FZDA-D), a set of subroutines for the manipulation of DIAL-MS disc and tape indices. QANDA (DEC-12-FISA-D) is used for the display frames and for TTY I/O. The DIAL I/O routines are read in from LINCtape \emptyset for use by MILDRED.

The program is loaded from DIAL by the usual command, LO NAME, UNIT. When tape motion stops, Frame 1 appears. This frame allows the operator to choose from four options:

L -- search for the named entry on Unit n,

E -- add an entry to the index on Unit n,

D -- delete the named entry,

and R -- restart DIAL from Unit \emptyset .

Options L and E lead to Frame 2, the file descriptor frame. For a LOOKUP, only the first three entries of Frame 2 need be supplied (UNIT, NAME, TYPE). For ENTER, at least the first four entries must be supplied (the above plus LENGTH). If the new entry is to be placed in the upper tape area, a "Y" response to the last question is required. Both routines then pass to the appropriate sections of MILDRED.

LOOKUP has two returns. The first is selected if no file of the name and type exists on the selected unit, or if there was an error in the calling sequence. In this case, the message "REQUESTED FILE DOES NOT EXIST" is displayed. An exit (linefeed) leads back to Frame 1.

The second return is selected if a file of the name and type was found. The complete file description is displayed when this return is selected.

ENTER has three returns. The first return is selected if a file of the name and type already exists. The second return indicates that there is no room for the requested file, or an error in the file description was detected. The DIAL index is unchanged if either of these returns is selected. The third return indicates successful entry of the new file. Control passes to FLOOKUP+6 to display the file description.

If the first return was selected, the question "REPLACE?" is displayed. A positive response (R/linefeed) leads to the REPLACE function in MILDRED. There are two returns. The first indicates there was no room for the new file (this can occur only if the specified length was greater than that of the original file), and "NO!!" is displayed. The second return is selected after a successful REPLACE, and control passes to FLOOKUP+6 to display the file description.

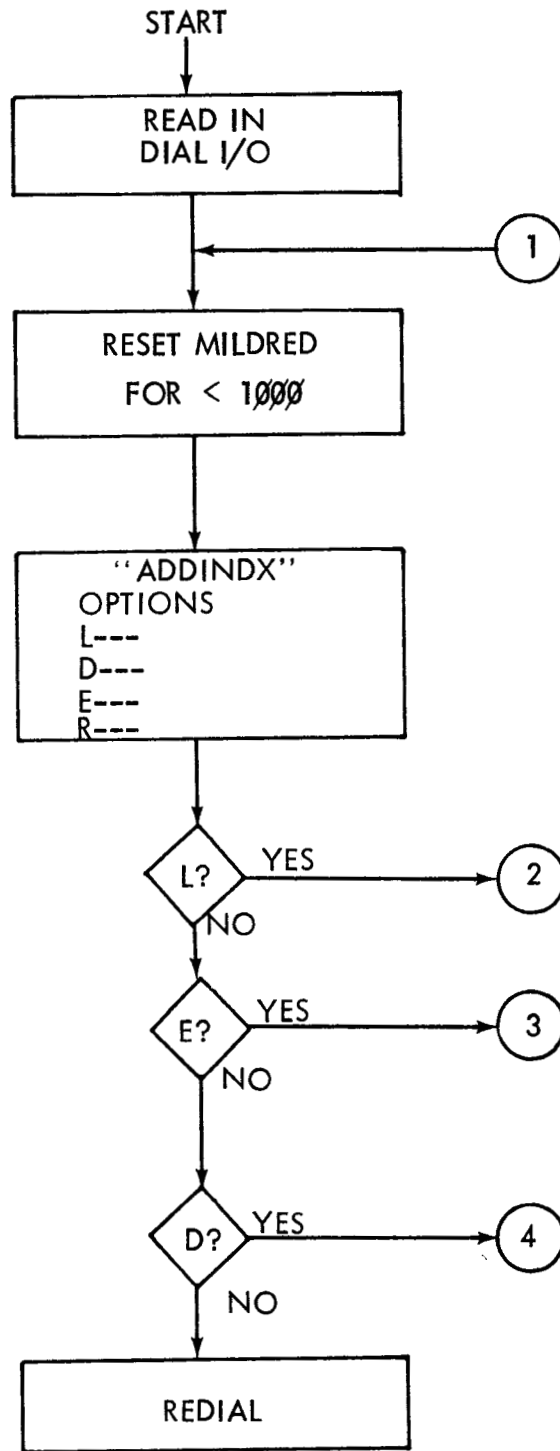
Option D leads to a frame in which "SURE??" is asked. This is to allow the operator a second chance in case D was inadvertently chosen. A positive response leads to Frame 2, and subsequently to the DELETE function in MILDRED. There is only one return; to Frame 1.

Operating Instructions:

1. Load ADDINDX from DIAL.
2. Leave the DIAL-MS system tape on Unit \emptyset . The WRITE LOCK may be on if no entries to the system tape are planned.
3. When tape motion stops, select one of the options.
 - L -- search for an entry on Unit n. Supply responses to the first three questions in Frame 2.
 - E -- enter a new file name or change the description of an old file. Supply answers to the first four questions for an entry in the lower tape area. Reply "Y" to the fifth question if the entry is to be in the upper tape area.
 - D -- delete an entry from the index on Unit n. Respond to the first three questions in Frame 2.
 - R -- restart DIAL from Unit \emptyset .
4. If "REPLACE?" appears after selection of option E, reply R/linefeed if you wish to replace. Otherwise, press linefeed.
5. If "NO!!" appears after an ENTER or REPLACE, press linefeed to return to Frame 1.

Restrictions: This program utilizes the I/O routines of DIAL-MS and therefore can only be run on an 8K (or more) machine. Users of 4K machines may want to consider the substitution of FRED (DEC-12-FZFA-D) for MILDRED. In this case, the instructions to read in the DIAL I/O must be deleted, and the proper addresses for FRED must be supplied (lines 47, 53, 57, 63, 340, 344, and 350).

FRAME
1



SIMPLIFIED FLOWCHARTS FOR ADDINDX

