IDENTIFICATION

Product Code: DEC-12-ZR9A-D

Product Name: BUILDING LAP6-DIAL
SOURCES Program
Description

Date Created: July 1, 1970

Maintainer: Software Services

LAP6-DIAL is editor, filing system and assembler for use with the PDP-12 computer. The editor and filing portion are derived from the basic LINC program LAP6[1] by Mary Allen Wilkes of Washington University. The assembly portion is derived from several programs used for the PDP-8 computer including PAL-D[2].

The Digital Equipment Corporation wishes to express to the author, Mary Allen Wilkes (Clark), and the Computer Research Laboratory of Washington University, St. Louis, Missouri, its appreciation for the development set forth in LAP6 as well as it's thanks for permission to use parts of the LAP6 program.

[1]M. A. Wilkes, LAP6 Handbook, Computer Research Laboratory Tech. Pep. No. 2, Washington University, St. Louis, May 1, 1967.

[2]PAL-D Assembler Programmer's Reference Manual DEC-D8-ASAA-D.

The DIAL-MS source includes all the system programs and associated routines that run under DIAL-MS, such as CREF and GENASYS. The system can be assembled if a working DIAL-MS system is available on unit Ø. Unit n in the following procedure is the unit that will contain the new system. In all PIP operations, unit 1 is specified for a tape system and unit 11 is used for a disk system.

1. Load DIAL-MS from unit Ø.

2. If two DF32 disks are present, turn one off at this time.

3. Type   →ZE ↵
          →AS EDITOR1,m ↵

   where m is the unit containing the DIAL-MS source.

4. Use PIP to transfer

   10 blocks from block 4ØØ (unit 1 or 11) to block 3ØØ (unit n)

   7 blocks from block 371 (unit 1 or 11) to block 311 (unit n)

   1 block from block 415 (unit 1 or 11) to block 32Ø (unit n)

   1 block from block 423 (unit 1 or 11) to block 321 (unit n)

5. Type   →ZE ↵
          →AS BUILD,m ↵

6. Use PIP again to copy

   1 block from block 4ØØ (unit 1 or 11) to block 31Ø (unit n)

   1 block from block 4Ø6 (unit 1 or 11) to block 345 (unit n)

   1 block from block 4Ø7 (unit 1 or 11) to block 365 (unit n)

   1 block from block 4Ø5 (unit 1 or 11) to block 366 (unit n)

7. Type   →ZE ↵
          →AS ASSEM1,m ↵

8. Use PIP to move

   11 blocks from block 37Ø (unit 1 or 11) to block 33Ø (unit n)

   1 block from block 4Ø2 (unit 1 or 11) to block 344 (unit n)

   2 blocks from block 4Ø3 (unit 1 or 11) to block 326 (unit n)

   3 blocks from block 4Ø5 (unit 1 or 11) to block 341 (unit n)

   1 block from block 422 (unit 1 or 11) to block 324 (unit n)

1

9.   Type   →ZE ⏎
             →AS FILECOMS,m ⏎

10. Request PIP to transfer

     4 blocks from block 4ØØ (unit 1 or 11) to block 35Ø (unit n)

11. Type   →ZE ⏎
             →AS PRINTMS,m ⏎
             →AS PXDXSRC,m ⏎

12. Use PIP again to copy

     4 blocks from block 4ØØ (unit 1 or 11) to block 361 (unit n)

13. Type   →ZE ⏎
             →AS LOADER,m ⏎

14. The last PIP operation is to move

     2 blocks from block 42Ø (unit 1 or 11) to block 354 (unit n)

15. Type   →ZE ⏎
             →AS PIP1,m ⏎
             →SB PIP,n,P ⏎

The program SLOWCREF[1], available through DECUS, can
be used to obtain cross-reference listings of the system programs.
16K of core and 3ØØØ scratch disk blocks (1 RKØ8 or 3 RSØ8 disks)
are required. If only two RSØ8 disks are present, cross-reference
listings can be obtained by changing the binary output pointer
(unit m) from 743Ø to 763Ø so that the Assembler output is
to tape rather than disk, enabling disk unit 1 to serve as a
scratch unit.

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[1]The program SLOWCREF is a modification of the PDP-12 program
CREF and is used to obtain cross-reference listings of long
programs.