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DECUS NO.	8-190
TITLE	PATCH UTILITY PROGRAM
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DATE	Submitted: April, 1969
SOURCE LANGUAGE	PAL

PATCH UTILITY PROGRAM

DECUS Program Library Write-up   DECUS No. 8-190

ABSTRACT

This program is a useful utility routine which allows the dup-
licating and updating of DECtape files of any PDP-8, TC01 format.
As it is derived from a combination of ODT (DEC-08-COBO-D) and
XDUP (DECUS 5/8-64), the user should be familiar with the opera-
tion of both of these programs.

USAGE

The routine opens with the query, "WORDS/BLOCK:". The user
should type the octal number of words per block of the DEC-
tape being copied or updated, followed by carriage return (CR).
The program then queries, "PATCH ? (Y:N)". The user then
types "Y (CR)" if he wishes to examine or modify the files as
they are processed, or "N (CR)" if he only wants to copy the
files. The program then asks the standard XDUP questions which
should be answered as in XDUP. When these answers are completed,
the first group of blocks is read into a contiguous series of
addresses in core. If the user typed "Y (CR)" in responce to
the "PATCH ?" query, the system types "BLOCK XXXX START at 2000"
and jumps into ODT. The user may then compute the location of
the change he wishes to make, make the changes and type "C".
The present buffer is written into the target blocks of the
output tape, a new buffer load is read, the system types "BLOCK
XXXX START AT 2000" and jumps to ODT. This process repeats
until the XDUP commands have been executed fully, If "N"
was typed in response to the "PATCH" question, operation is
continuous and is identical to XDUP except that the format
need not be standard.

The program may also be used to examine or dump any desired
data from DECtape. For example, to obtain a dump of a system
tape directory, the following dialog can be executed, having
loaded PATCH.

Starting address for PATCH is 1600.

              WORDS/BLOCK: 2ØØ (CR) (LF)

              PATCH ? (Y:N) Y (CR) (LF)

              TRANSFER N BLOCKS: 3 (CR) (LF)

              FROM UNIT#: 8 (CR) (LF)

              STARTING AT BLOCK: 11 (CR) (LF)

(CR) (LF)

ONTO UNIT#: 8 (CR) (LF)

STARTING AT BLOCK: 11 (CR) (LF)

BLOCK 0011 STARTS AT 2000 (CR) (LF)

M7777 0 (LF) (CR)

1473/0001 2000 (LF) (CR)

1474/0777 2577 (CR) (LF)

W (CR) (LF)

2000/7617 (CR) (LF)

2001/7744 (CR) (LF)

etc., for 600_8 lines.

At the end, if no further action is desired, type, "7600G" and the system will return to INDEX, or type "C", and the system will rewrite the directory on Tape Unit #8. If any change had been made, as changing a name, for example, the changed directory replaces the original.

The program computes the number of DECtape blocks of the specified number of words which can fit in the core buffer (2000-7577) and uses this entire space if necessary. Consequently no other program except the loaders (7600-7777) can be saved in core while PATCH is in use.