



**DECUS PROGRAM
LIBRARY CATALOG**

FOR

PDP- 7/9, PDP-9 AND PDP-15

UPDATE - SEPTEMBER 1973
ADD TO MARCH 1973 CATALOG

MARCH 1973
DIGITAL EQUIPMENT COMPUTER USERS SOCIETY
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DECUS Program Library Contacts

When users find it necessary to call the DECUS Program Library for information, it helps to have the name of a specific person with whom they can speak. For your information we have compiled the following list:

Accounting or Pricing Information - Karen King X2447

PDP-9, PDP-10, PDP-12, PDP-15 and LINC orders and information - Cheryl Barber X2524

PDP-8 library orders and information - Jackie Page X2524

PDP-11, FOCAL and Educational Application orders and information - Stacia Taylor X2524

New or proposed library submissions, changes, etc., general library contents - Ferne Halley X2524

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DECUS SERVICE CHARGES

DECUS NO.	WRITE-UP	PAPER TAPE		LISTING	DECTAPE		LINCTAPE		MAGTAPE		OTHER INFORMATION
		BIN	ASCII		U/S	D/S	U/S	D/S	U/S	D/S	
9-2	NC	\$1.	\$5.	NA	\$	\$	\$	\$	\$	\$	
9-3	NC		5.	NA							
9-4	NC	1.		NC							
9-5	NC	1.		NA							
9-6	NC		5.	NC							
9-7	NC	1.	5.	NA							
9-8	NC	1.	5.	NC							
9-9	NC	1.	5.	NA							
9-10	NC	1.	5.	NC							
9-11	NC	1.		5.	5.	17.					On one DECTape
9-13	NC			5.	5.	17.					On one DECTape
9-14	NC	1.	5.	NA							
9-16	NC	1.	5.	NA							
9-17	NC			NA	5.	17.					On one DECTape
9-19	NC	1.	5.	NA							
9-20	NC	1.	5.	5.	5.	17.					On one DECTape
9-21	NC	1.	5.	NC							
9-22	NC	1.	5.	NA							
9-23	NC	1.	5.	NC							
9-24	NC	1.	5.	5.							
9-25	NC	1.	5.	NC							
9-26	NC		5.	NC							
9-27	NC		5.	NC							
9-28	NC		5.	NC							
9-29	NC		5.	NA							
9-30	NC		5.	NC							
9-31	NC	1.	5.	NA							
9-32	NC	1.	5.	NA							
9-33	NC	1.	5.	NA							

N/C - No Charge
 N/A - Not Available

U/S - User Supplied Tape (Certified)
 D/S - DECUS Supplied Tape

For information not contained on this sheet see General Information at end of this section

DECUS SERVICE CHARGES

DECUS NO.	WRITE-UP	PAPER TAPE		LISTING	DECTAPE		LINCTAPE		MAGTAPE		OTHER INFORMATION
		BIN	ASCII		U/S	D/S	U/S	D/S	U/S	D/S	
9-34	NC	\$ 1.	\$ 5.	\$ NA	\$	\$	\$	\$	\$	\$	
9-35	NC	1.	5.	NA							
9-36	NC	1.	5.	NA							
9-37	NC	1.	5.	NC							
9-38	NC	1.	5.	NC							
9-39	NC	1.	5.	NC							
9-40	NC			NA	5.	17.					On one DECTape
9-42	NC	1.	5.	5.							
9-43a	NC			NA	5.	17.					On one DECTape
9-45	NC	1.	5.	NA							
9-46	NC			NA	5.	17.					On one DECTape
9-47	NC	1.	5.	NC							
9-48	NC		5.	NC							
9-49	NC			NA	5.	17.					On one DECTape
9-50	NC		5.	NC							
9-51A, B, C	NC			NC							
9-52A, B	NC			NC							
9-54	NC			NA							
9-55	NC			NA							
9-56	NC	1.	5.	NC							
9-57	NC			NA	5.	17.					On one DECTape
9-58	NC			NA							
9-59	NC		5.	NA							
9-61	NC		5.	NC							
9-62	NC		5.	NC							
9-63	NC	1.		NA							
9-64	NC	1.	5.	NC							
9-65	NC			NA	5.	17.					On one DECTape
9-66	NC	1.		NA	5.	17.					On one DECTape

N/C - No Charge
N/A - Not Available

U/S - User Supplied Tape (Certified)
D/S - DECUS Supplied Tape

For information not contained on this sheet see General Information at end of this section

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When a large number of write-ups is ordered, but does not constitute a complete library, a service charge of 10¢ per write-up will apply.

In some cases it is possible to pack programs on DECTape. Such cases will be considered on an individual basis. Please contact the DECUS PDP-9 Library Controller for specific information.

Programs customarily distributed on paper tape will not be packed on DECTape.

A complete set of all current PDP-9 write-ups is available for a service charge of \$10.00.

All User Supplied DECTapes must be already certified. DECUS cannot/will not copy programs onto uncertified tapes.

DECUS NO. 9-73A & B

DECIN AND DECOU

David Hale, Aston University, Birmingham, England

DECIN is an external function subroutine (the result comes back to the main program via AC). It allows the entry on the TTY keyboard of a signed decimal integer terminated by a CR. This is converted into a 2's complement signed binary integer within the normal integer number range (± 131071). Input is in IOPS ASCII, thus RUBOUT and \uparrow U can be used. If a number is outside number range IOPS 66 will be output, if an illegal character (e.g. non-digit) is included in input IOPS 67 will be output. Integer input can be restarted with \uparrow P after an IOPS error.

DECOU is an external function subroutine (the integer is transferred to the routine via the AC). It will print on the teletype, on .DAT 4, a signed decimal integer. Leading zeros are replaced with spaces and the result is right justified. Only 2's complement single precision integers can be used.

Minimum Hardware: 8K PDP-9
Source Language: MACRO 9

DECUS NO. 9-74

FOCAL Conic-Plotting Routines

A. B. Durell, The Ontario Institute for Studies in Education, Toronto, Canada

This package of programs uses the FOCAL plotting feature to display conics on a CRT. Subroutines allow conics to be translated and/or rotated. The package is intended as an aid for studying conic sections.

Minimum Hardware: 8K PDP-9, Type 34H Interface with appropriate CRT or equivalent PDP-8 components
Source Language: FOCAL

DECUS NO. 9-75A & B

DRAW and DRAWDH

David Hale, Aston University, Birmingham, England

This is an external subroutine which allows the FORTRAN or MACRO user to draw straight line approximations between successive points on the PDP 9 display. The original version needed EAE and did not use Z modulation. DRAW uses the normal .DA argument transfer call. DRAWDH does not use .DA. The two routines differ only in calling method and speed - DRAWDH is slightly faster.

Minimum Hardware: PDP-9, 34H Display
Other Programs Needed: Integer Arithmetic
Storage Requirement: 255₈
Source Language: MACRO-9

DECUS NO. 9-76 (Formerly DECUS NO. 15-15)

RBØ9 Diagnostic

Stanley M. Rose, Laboratory of Computer Science, Massachusetts General Hospital, Boston, Massachusetts

RBØ9 is a handler to be incorporated into the PDP-9/15 system diagnostic for the complete testing of the RBØ9 disk system.

Minimum Hardware: PDP-9, DECTape, RBØ9, EAE
Other Programs Needed: PDP-9, System Diagnostic (MAINDEC-15-D7CA)
Storage Requirement: 2025₈
Source Language: MACRO

DECUS NO. 9-77

NUMBER

Larry V. East, Los Alamos Scientific Laboratory, Los Alamos, New Mexico

NUMBER is a subroutine for outputting floating point numbers on a CALCOMP plotter or CRT display. The routine is written in FORTRAN IV and is intended for use on a PDP-9 in conjunction with the plotter and display output routines contained in DECUS NO. 9-13.

Minimum Hardware: 8K PDP-9 or PDP-15 with Incremental Plotter and/or CRT Display
Other Programs Needed: DECUS NO. 9-13
Storage Requirement: Approximately 415₁₀ words
Source Language: FORTRAN IV

DECUS NO. 9-78

CONSOL-9

Jerry Palin, Auditory Research Labs, Princeton University, Princeton, New Jersey and Paul Condit, Symbolic Systems, New Providence, New Jersey

CONSOL-9 is an expanded version of PROCON-9 (DECUS NO. 9-14). In addition to providing the programmer with a set of debugging aids such as core dumps and modifications (both in octal and mnemonic formats) it also provides paper and DECTape handlers for duplication, verification and file input and output capabilities.

Minimum Hardware: 8K PDP-9, EAE, Optionally supports paper tape reader/punch, DECTape and Extended Memory
Source Language: MACRO-9

DECUS NO. 9-79a

FOCAL LSL: An Advanced FOCAL for the PDP-9/15

Larry V. East, Los Alamos Scientific Laboratory,
Los Alamos, New Mexico

FOCAL LSL is an expanded FOCAL interpreter for use on a PDP-9 or PDP-15 with 12K or more memory. (An abbreviated version for use on 8K systems is also supplied.) New features include doubly subscripted variables, an expanded set of library commands, use of general expressions in response to ASK commands, and computed line number capability. Up to four simultaneous users are supported in 16K or larger systems while operating under the ADSS or DOS Monitors. Most available peripherals (line printer, plotter, card reader, etc.) may be utilized.

Minimum Hardware: 12K or larger PDP-9/15 with
EAE and DECTape
Other Programs Needed: ADSS V4E, V5A or DOS; may
now be used with FP-15
Restrictions: Has not been tested with API;
The "Library List" command cannot
be used under DOS if the
input library is a DOS disk file
Source Language: MACRO

DECUS NO. 9-80

1816 (V04)

Paul R. Condit, P. O. Box 261, Summit, New Jersey

1816 transfers ASCII files from PDP-9 Advanced Software
System file format to PDP-11 DOS file format and vice-versa.

Minimum Hardware: 8K PDP-9; DECTapes
Other Programs Needed: PDP-9/15 Advanced Software
System
Source Language: MACRO-9/15

DECUS NO. 9-81

PAL-9 (V01)

Paul R. Condit and Jerry Palin, Auditory Research Labs,
Princeton University, Princeton, New Jersey

PAL-9 is a compact assembler for the PDP-9 that runs under
the Advanced Software Monitor System and allows the 8K
PDP-9 user to assemble source code generating up to 392
symbols with the convenience of both DECTape source input
and binary output.

Minimum Hardware: 8K PDP-9; 2 DECTapes
Other Programs Needed: .DTX BIN (Included)
Miscellaneous: Should run on a PDP-15, but has
not been tested
Source Language: MACRO-9/15

NOTE OF INTEREST

Another program of interest to PDP-9/15 users would be
DECUS NO. 8-460, TT89. The program writes ASCII files
from PDP-8 devices onto a PDP-9 DECTape. The PDP-9
DECTape directory can also be listed or zeroed, and files
can be deleted.

The program is available as write-up and 1 binary and 7
ASCII paper tapes.

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DECUS SERVICE CHARGES

DECUS NO.	WRITE-UP	PAPER TAPE		LISTING	DECTAPE		LINCTAPE		MAGTAPE		OTHER INFORMATION
		BIN	ASCII		U/S	D/S	U/S	D/S	U/S	D/S	
15-1	NC	\$ 1.	\$ 5.	\$ 5.	\$ 5.	\$ 17.	\$	\$	\$	\$	On one DECTape obj/src
15-2	NC			NA	5.	17.					On one DECTape obj/src
15-3	NC			NA	5.	17.					On one DECTape obj/src
15-4	NC		5.	NA							
15-5	NC	1.	5.	NA	5.	17.					On one DECTape obj/src
15-6a	NC		5.	NA							
15-7	NC	1.	5.	NA							
15-8	NC	1.	5.	NA							
15-9A	NC	1.	5.	NA							
15-9B	NC	1.	5.	NA							
15-10	NC	1.		5.	5.	17.					On one DECTape obj/src
15-11	NC	1.	5.	NC							
15-12	NC			5.	5.	17.					On one DECTape obj/src
15-13	NC	1.	5.	5.	5.	17.					On one DECTape obj/src
15-14a	NC		5.	NA							
15-16	NC		5.	NA							
15-17	NC		5.	NC							
15-18	NC	1.	5.	NC							
15-19	NC	1.	5.	NC							
15-20	NC	1.	5.	NC							
15-21	NC			NA	5.	17.					On one DECTape obj/src
15-22	NC			NC	5.	17.					On one DECTape
15-23	NC			NA	5.	17.					On one DECTape
15-24	NC		5.	NC							
15-25	NC		5.	NC							
15-26	NC			NC	5.	17.					On one DECTape
15-27	NC	1.	5.	NC							
15-28	NC		5.	NA							
15-29	NC			NA	5.	17.					On one DECTape

N/C - No Charge
 N/A - Not Available

U/S - User Supplied Tape (Certified)
 D/S - DECUS Supplied Tape

For information not contained on this sheet see General Information at end of this section

DECUS SERVICE CHARGES

DECUS NO.	WRITE-UP	PAPER TAPE		LISTING	DECTAPE		LINCTAPE		MAGTAPE		OTHER INFORMATION
		BIN	ASCII		U/S	D/S	U/S	D/S	U/S	D/S	
15-30	NC	\$	\$	\$ NA	\$ 5.	\$ 17.	\$	\$	\$	\$	On one DECTape obj/src
15-31	NC		5.	NC							
15-32	NC		5.	NC							
15-33	NC	1.	5.	NA							
15-34	NC			5.	5.	17.					On one DECTape
15-35	NC	1.	5.	5.							
15-36	NC	1.	5.	NC							
15-37A	NC			5.	5.	17.					On one DECTape With 15-37A
15-37B	NC			NA	5.	17.					
15-38	NC		5.	NC							
15-39	NC			NA	5.	17.					On one DECTape
15-40	NC			NA	5.	17.					On one DECTape src
15-41	NC		1.	NC							
15-42	NC	1.	5.	NC							
15-43A	NC			NA	5.	17.					On one DECTape obj/src With 15-43A obj/src
15-43B	NC			NA	5.	17.					
15-44	NC	1.	5.	NC							
15-45	NC			NA	5.	17.					On one DECTape
15-46	NC		5.	NC							
15-47	NC		5.	NC							
15-48	NC	1.	5.	NA							
15-49	NC			NA	5.	17.					On one DECTape obj/src
15-50	NC			5.	5.	17.					On one DECTape src
15-51A	NC	1.	5.	NC							
15-51B	NC	1.	5.	NC							
15-52A	NC			NA	5.	17.					On one DECTape With 15-52A
15-52B	NC			NA	5.	17.					
15-53	NC			10.	5.	17.					On one DECTape obj/src
15-54	NC			NC	5.	17.					On one DECTape src

N/C - No Charge
N/A - Not Available

U/S - User Supplied Tape (Certified)
D/S - DECUS Supplied Tape

For information not contained on this sheet see General Information at end of this section

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When a large number of write-ups is ordered, but does not constitute a complete library, a service charge of 10¢ per write-up will apply.

In some cases it is possible to pack programs on DECTape. Such cases will be considered on an individual basis. Please contact the DECUS PDP-15 Library Controller for specific information.

Programs customarily distributed on paper tape will not be packed on DECTape.

A complete set of all current PDP-15 write-ups is available for a service charge of \$10.00.

All User Supplied DECTapes must be already certified. DECUS cannot/will not copy programs onto uncertified tapes.

Algorithm for both SQRT and ISQRT by George K. Kostopoulos, Computer Design 11:8, August 1972

Minimum Hardware: PDP-9/15 with EAE
Other Programs Needed: Advanced Monitor Software System or Background/Foreground Monitor Software System
Restrictions: On ISQRT - Negative integers are treated as 18-bit positive numbers
Source Language: MACRO

DECUS NO. 15-57

EAI-680 GPI Handlers

Thomas L. Drake, Clemson University, Clemson, South Carolina

A collection of FORTRAN callable subroutines is provided for servicing GPI interrupts from the EAI-680. On the occurrence of selected GPI interrupts, these routines permit data transfers to occur between the PDP-15 and EAI-680 via the A/D, MDAC, DCA, and comparators. One set of routines are designed for RSX while the remaining routines operate under DOS.

Minimum Hardware: PDP-15/EAI - 693/680 Computer System
Other Programs Needed: V5-A/DOS-15/RSX-15
Source Language: MACRO-15

DECUS NO. 15-58 A&B

A. MTS. A Variable-record-length Magnetic Tape Handler
B. USEMTS Implement the Use of the Magnetic Tape Handler MTS.

Bob Schor, Rockefeller University, New York, New York

A. MTS. is a short (647₈ word) powerful magnetic tape handler for the TU20 drive on a PDP-15. This handler is up to five times faster at reading and writing, and uses a fifth as much tape, as any tested DEC-supplied handler. In addition, the .MTAPE commands have been designed to facilitate file and record searching. It can be easily linked to a FORTRAN program with the utility routine USEMTS.

B. USEMTS consists of a series of FORTRAN-callable routines to (a) read and write arrays on tape, (b) perform efficient file and record searching, (c) write file-marks, (d) set density and parity as required, and (e) read the status of any drive to check for file-marks, record length errors, end-of-tape reflector, or Load Point (BOT).

Minimum Hardware: PDP-15; Magnetic Tape (TU-20)
Other Programs Needed: V5A or DOS (or earlier, possibly)
Source Language: MACRO-15

DECUS NO. 15-59

AMPHAS-15, A Modular Pulse Height Analysis System for the PDP-15

R. Muller and U. Peyer, Laboratorium fur Kernphysik der Eidgenossischen Technischen Hochschule, Zurich, Switzerland

For a PDP-15/40 computer, a real-time operating system for pulse height analysis was developed. It is controlled by the background/foreground monitor so that the computing power can be fully utilized. The system consists of a real-time executive program common to all applications and a number of real-time subroutines added in a modular way for data acquisition, display, storage of spectra on tape or disk and data reduction. Up to four analog-digital converters can be used.

Minimum Hardware: 24K PDP-15/40; 1 VP15A; 2 NP02LA
Other Programs Needed: Background/Foreground Monitor V3A
Source Language: MACRO-15

DECUS NO. 15-60_a

F4DBUG

Peter Beckett, British Aircraft Corporation, Warton Aerodrome, Warton, Preston, Lancashire, England

F4DBUG provides object time facilities for interrogation and modification of Real and Integer storage locations in FORTRAN programs as well as breakpoint insertion and partial program execution with reference to FORTRAN statement numbers.

Minimum Hardware: PDP-9/15 with EAE, DECtapes, TTY
Other Programs Needed: KM9-15 or DOS-15
Storage Requirement: 4411₈ locations plus BCDIO and FIOPS
Source Language: MACRO

DECUS NO. 15-61_a

FOCAL LSL

NOTE: See DECUS NO.9-79a for details pertaining to this program. It is noted here for cross-reference purposes only.

DECUS NO. 15-62

DOSRES: Dose-Response Analysis of Ungrouped Quantal Data

Rudolph H. de Jong, Anesthesia Research Center, University of Washington School of Medicine, Seattle, Washington

DOSRES computes parameters such as the median dose (ED_{50}) and slope of the dose-response curve that best fit a set of quantal observations. The newer statistical developments incorporated in DOSRES permit input of individual (ungrouped) quantal observations coded either zero (no-response) or one (yes-response). Previous probit and logit techniques demanded grouping of subjects and poorly handled 0% or 100% responses. The appropriate logistic dose-response curve is obtained by maximizing the likelihood function; as the solution is nonanalytical, estimates of the curve parameters are refined iteratively.

Minimum Hardware: PDP-15, ADSS-KMS15; high speed reader or card reader
Storage Requirement: 5.5K + handlers + ADSS
Restrictions: 12K of core or more
Source Language: FORTRAN

DECUS NO. 15-63a

CLOCK - A Software Clock for Real Time Systems

Godfrey D. Watson, School of Oceanography, Oregon State University, Corvallis, Oregon

This routine keeps track of the time for real-time foreground/background or advanced monitor jobs.

'CLOCK' uses .timer to increment its internal time registers which contain the year, month, day, hour, minute, second, hundredths of seconds and the day of week.

Entry points to this routine allow the time to be set or fetched by user programs. Global symbols are included to allow direct access to certain parameters by user programs.

This routine is loaded as a relocatable subroutine using the linking loader.

Minimum Hardware: PDP-9 or PDP-15, KW15 Real-Time Clock
Other Programs Needed: .DA from FORTRAN library
Monitor/Operating System: B/F Monitor (Page or Bank Mode) or ADVANCED MONITOR
Source Language: MACRO-15

DECUS NO. 15-64

RSX UPDATE

E. J. Haas, Goodyear Tire and Rubber Co., Akron, Ohio

This is an RSX version of UPDATE to update system libraries. The modifications are as follows:

1) CAL's have been converted to RSX CAL's

2) The buffer area now resides in the free area above the program rather than below

3) Register Control instructions were used where applicable

4) The default Library name is .LIBRX

Minimum Hardware: PDP-15, 16K, EAE, RSX PLUS Executive, Disk
Miscellaneous: The operation of the program is the same as described in the DEC manual DEC-15-YW2B-DN7 UPDATE UTILITY PROGRAM
Source Language: MACRO-15

DECUS NO. 15-65

VWRED - Redundancy Reduction

Thomas L. Drake, Clemson University, Clemson, South Carolina

A first-order redundancy reduction algorithm is implemented by the subroutine VWRED which converts a path described by a series of x-y coordinate pairs to an array of nonredundant points. A specific application is the processing in real-time data which originates from a Writing Tablet while in the data mode. Special versions of the SQRT and ATAN2 functions are used to maximize the processing rate. Data rates in excess of 2,000 coordinates per second can be easily handled.

Monitor/Operating System: V5-A/DOS-15
Source Language: MACRO-15

DECUS NO. 15-66

ABSOLU and RANDEX, Fast Overlays Using Random Access

Johan Wieslander, Lund Institute of Technology, Lund, Sweden

These two programs allow a maximum loading time for a non-resident link of less than 200 ms/K.

ABSOLUTE is a postprocessor for CHAIN and converts the XCU-file from CHAIN to a single random access file where the links are stored in core image form. RANDEX is a replacement for the system program EXECUTE and is used to load disk resident links when called.

Minimum Hardware: PDP-15 running DOS-15 with RF-15 disk
Storage Requirement: ABSOLUTE (4771)₈
RANDEX (277)₈
Restrictions: Core must be multiple of 8K, page mode operation with overlays with at least 1 link
Source Language: MACRO-15

DECUS NO. 15-67

VPA.

H. Michael Schindler and Wolfgang Weber, 1st Institute of Physics, University of Vienna, Vienna, Austria

Handler for the VPI5A storage tube display under the B/F-Monitor System. Will handle data modes 2 & 6 (IOPS ASCII), 3 (IMAL), 4 & 5 (dump store & non-store). Non-store refreshing from core at interrupt level.

Minimum Hardware: PDP-15/30, B/F Monitor, VPI5A
Source Language: MACRO-15

DECUS NO. 15-68

SCOPE1

Gerhard Benesch, 1st Institute of Physics, University of Vienna, Vienna, Austria

Utility program to display coordinate axes and grid to plot user defined functions and points on the VPI5A display. Calls VP.

VP - MACRO-15 routine interfacing SCOPE1 to VPA.-
Handler

Minimum Hardware: PDP-15/30, BFV3A+VPA., VPI5A,
DECtape, Paper tape reader
Other Programs Needed: VPA. (DECUS NO. 15-67),
VP (MACRO Display Routine)
Source Language: FORTRAN IV

DECUS NO. 15-69

LINK15 - Remote Job Entry

Dr. Lawrence Kirsch, Brandeis University, Waltham, Massachusetts
Submitted by: James D. Pitts, III, Digital Equipment Corporation, Maynard, Massachusetts

The LINK15 program was developed at Brandeis University to provide remote job entry compatibility over telephone lines to the CDC 6600 AEC Computer Facility at New York University.

This software was designed for a PDP-15 System under the Advanced Software System. The package is easily applicable to PDP-15 systems with disks that utilize either the Advanced Software System or the Disk Operating System. The RJE protocol is applicable only to the AEC facility in New York but may be modified for other RJE applications.

Minimum Hardware: PDP-15, DECtape, DP09A, TTY,
EAE, DW15
Other Programs Needed: KM15 or DOS-15
Storage Requirement: 16,384 words of memory
Source Language: MACRO-15

DECUS NO. 15-70

SIMUL8 - Educational Simulator

Jonathan Posin, University Hospital, Boston, Massachusetts

SIMUL8 simulates a minicomputer with 25,10 words of memory and a variable memory cycle time up to 10 seconds. It provides a continuously updated display of the various registers and memory locations on the VT05 terminal for interactive operation. It runs in a decimal radix, and has a repertoire of 10 instructions (Transfer on Minus, CLear and Add, ADD, SUBtract, STOrE, MultiPIY, DIVide, ReaDS, PRinTs, TRAnSfer). It is based on the moron and cubbyhole concept as outlined in Chapter 1 of E. I. Organick's A FORTRAN IV Primer (Addison-Wesley Co. c. 1966). It is a useful educational tool for the person becoming newly acquainted with computers and computer programming.

Minimum Hardware: PDP-15 with EAE and VT05
Alphanumeric Terminal
Other Programs Needed: PDP-15 Advanced Monitor
Storage Requirement: 2220₈ words
Source Language: MACRO

DECUS NO. 15-71

EDIT-L: Text Editor for the PDP-9/PDP-15

Digital Equipment Corporation
Revision by: Larry V. East, Los Alamos Scientific Laboratory, Los Alamos, New Mexico

EDIT-L is a modified version of the symbolic text editor supplied with the ADSS operating systems for the PDP-9 and PDP-15. Two new commands, LIST and FORM, have been added to allow text to be listed on a line printer, and the action of CTRL/P (↑ P) has been modified in an attempt to make the program more foolproof. Modifications are also incorporated to allow the ICLOSE and SCLOSE commands to operate properly. EDIT may easily be replaced by EDIT-L on the ADSS system device.

Minimum Hardware: 8K PDP-9/15 ADSS
Source Language: MACRO