



ULTRIX

Software Family

V7M-11

digital

A product derived from Bell Labs UNIX™ Systems.

V7M-11 is UNIX™ Software . . . Plus

Digital developed V7M-11 in response to the rapidly growing demand for UNIX® software systems. It is an enhanced and modified version of Bell Labs' UNIX Time Sharing System, Seventh Edition ("V7 system"). Like V7, V7M-11 runs on all Digital memory-managed PDP-11's. But V7M-11 goes farther, offering key advantages for all users, particularly those in the application development environment.

Breaking new ground

V7M-11 offers the same functionality and capability that made V7 popular. But in addition to the standard features, V7M-11 incorporates invaluable additions:

- Includes a complete error logger and user mode diagnostics
- Provides bad blocking for large disk systems
- Includes the proven VI screen editor (from the University of California at Berkeley UCB 2.8 UNIX System) for a program development and document preparation
- Includes device driver support for PDP-11 peripherals
- Provides user overlay kernel scheme for running large programs in non-separated instruction and data machine
- Fully supported by Digital's Field and Software Service Groups

Three versions available

The V7M-11 distribution tape or RL02 disk contains three versions of V7M-11:

- A separate instruction and data space version for use with the PDP-11/44, 11/45, and 11/70 processors
- An overlay kernel version for use with nonseparate instruction and data space processors (Micro/PDP-11, PDP-11/23, 11/23+, 11/24, 11/40, and 11/60)
- The preconfigured monitors used only for loading from the distribution tape

Standard V7 System features are included

Users familiar with the V7 system will find all the standard features they value in V7M-11.

- *Shell (Bourne)* – a command language interpreter which allows users to access the UNIX system. It includes control flow primitives, parameter passing, variables and string passing. The Shell also allows prototyping a system before programming, saving valuable system design time.
- *Shell Script* – allows Shell instructions to be combined, to perform complex operations. May be used in place of C programs.
- *Pipes* – consists of inter-process channels, where the standard output of one process is re-directed to the standard input of another process.
- *Kernel* – a small set of necessary routines for basic UNIX systems functions such as process switching, scheduling, inter-process communications, device handling, file system implementation, hardware management, and system security.
- *C language*: powerful and concise. V7M-11, like Bell Labs V7, is written in the C language. C is a general-purpose programming language offering modern control flow and data structure capability, and a rich set of operations and data types.

- *Mail* – the standard UNIX mail system.
- V7 byte stream file system
- “C” compiler
- ASSEMBLER
- FORTRAN 77 (for separate instruction and data machines only)
- UNIX system commands and utilities

Digital support: single-source reliability

V7M-11 is a standard Digital product fully warranted and supported by Digital. For our customers, this means the hardware, V7M-11 operating system, service and support are all from a single source. All documentation is provided with V7M-11 and the product is customer-installable, or Digital will install on a time and materials basis.

Customers ordering V7M-11 will receive an option code sublicense directly from Digital. The purchase price of V7M-11 is based on the number of users for which the CPU is licensed.

Digital hardware and UNIX software: together from the start

For nearly 14 years, UNIX software has been running on Digital hardware. In fact, work on the UNIX software was begun by Bell Telephone Laboratories in 1969, using Digital hardware.

The intent of UNIX software originators was to create an operating system that would support coordinated teams of programmers in the development of application programs. Inherent in its design was the simplification of the dialogue between man and machine, enabling programmers to make more efficient use of computers.

As the UNIX system was enhanced, various members of the PDP-11 family were used as the development machines. Thus, for more than a decade the UNIX system continues this tradition, offering PDP-11 mini and micro users the benefit of a fully-supported UNIX package as well as ongoing PDP-11 product development.

**UNIX is a trademark of Bell Laboratories.*

The information in this document is subject to change without notice
and should not be construed as a commitment by Digital Equipment Corporation.
Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

UNIX™ is a trademark of Bell Laboratories.

The following are trademarks of Digital Equipment Corporation: V7M-11, PDP, The Digital Logo, ULTRIX, DEC

digital